



January 25, 1991

TC-8 Arrives Safe and Sound at Cape Canaveral

By Beth Littlefield, CCAFS

Titan/Centaur-8 has been delivered to Cape Canaveral via a C-5B transport aircraft. Its arrival at Cape Canaveral Air Force Station was an exciting experience for the Cape's employees when the event occurred at the skid strip on the evening of December 12.

An estimated 100 people attended this important occasion. They included not only General Dynamics personnel, but others from Martin Marietta, the Air Force, Aerospace Corporation, and Johnson Controls.

Approximately 45 GD employees, including representatives from Engineering, Site Support, Safety, Material Services, and Quality Assurance were on hand to support unloading operations the next day.

Chuck Wagner, structures/airframe engineer, made sure the offload track was properly assembled for removal of TC-8 from the airplane. Chuck also had the opportunity to witness the loading of the vehicle in San Diego and to accompany

the Centaur on its flight across the United States. Chuck said, "I feel that the whole operation was a good learning experience for everyone involved. It will help all future operations go even more smoothly."

Dave Kube, also a structures/airframe engineer, was responsible for transferring TC-8 onto the trailer and also for the 10-mile transport to the Vertical Integration Building (VIB).

Dave stated that after preparing for this day for such a long time, he was pleased to have the Centaur at the Cape.

Wayne Rudisaile supervised the installation of the vehicle into the Integrated Centaur Checkout Cell (Cell 3) in the VIB. The Centaur will undergo inspection and mechanical build-up and most

systems will be tested while in Cell 3. TC-8 will be transported to Launch Complex 41 for mate to the Titan IV Booster after testing is completed. Wayne commented, "The whole operation went smoothly and gave a good start to the Titan/Centaur Program."

The enthusiasm of the Titan/Centaur team can be reflected by senior structures/airframe engineer Terry Gillette, who oversaw the entire operation. "Considering that the hardware and most of the people were new, I feel that the entire operation, including the fine support we received from San Diego, proceeded in an excellent manner," Terry said. "I am confident it will be the first of many more."

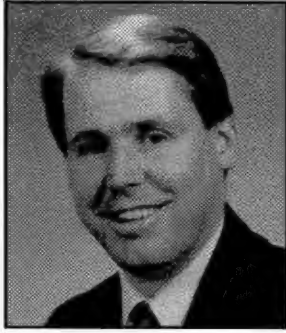
This is a sentiment shared throughout Space Systems Division.



TC-8 is lowered into Cell 3 in the Vertical Integration Building.



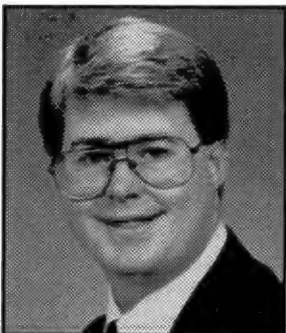
Wayne Rudisaile (center), structures/airframe engineer, conducts a pre-test briefing with Titan/Centaur offloading crew prior to lifting TC-8 onto the transport trailer.



Bob Brooke, Finance — Bob's achievements in 1990 were numerous. He revamped the division's 21 service agreements with Convair to ensure cost accuracy and assess if services provided were necessary. This effort resulted in a savings of \$2.4 million to Space Systems. Bob received an Extraordinary Achievement Award for his successful efforts associated with the review of Motivational Programs and a Rapid Recognition Award from Engineering for outstanding assistance. Bob is presently working toward his Masters of Science in Accounting at San Diego State University and plans to obtain his Certified Public Accountant's license as well.



Kris Buitenhek, Information Resource Management — Kris formed an IRM/DSD team to identify cost savings associated with recurring support of computer commodity equipment. The result was a \$250 thousand savings in the personal computer cost center. She was also the instigator of a \$15.8 million savings for 1991 through 1993 through her coordination of the Space Systems Division computer capital cost reduction effort. And by coordinating the division's Computer Development and Processing operating budget submittals, Kris was responsible for another savings by reducing a \$31.5 million target expenditure to \$28.8 million.



Keith Croan, Material — Keith was Material Organization's team leader on the Superconducting Super Collider (SSC) program. He prepared the plan and manpower requirements to assure a successful proposal effort, prepared SSC procurement strategy presentation on pro-forma contracts, and contributed to preparation of subcontract management text for the proposal. He also worked as the procurement team leader for the fact-finding effort on the solar panel subsystem portion of the Survivable Power System (SUPER) program. The team's fact-finding reduced proposed subcontracting dollars by \$4.8 million. Keith, a take-charge team player, received an Extraordinary Achievement Award and a Pacesetter Award for his accomplishments in 1990.

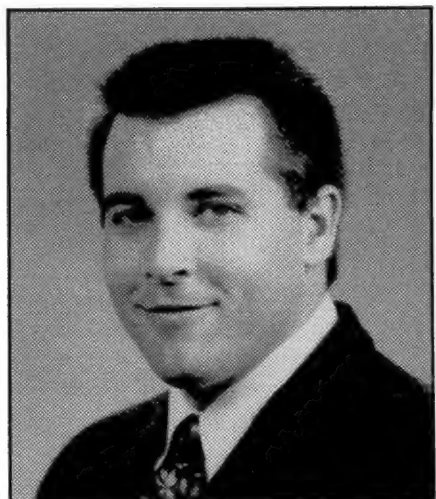


Jim Dennison, Contracts & Estimating — Jim's leadership by example is strongly evidenced by the fact that his own people nominated him for Employee of the Year. He embodies what the TQM philosophy says supervision should be. In his role as a leader, he has shown supervisory skills by team building through attitude, gaining trust, establishing rapport and communication, and maintaining a commitment to high standards.



Mike Felchlin, Human Resources — Mike earned recognition for establishing an exemplary Employee Assistance Program (EAP) which promotes confidential and professional assistance to employees and their families when personal problems affect their lives and work. Mike is recognized in Human Resources and by those he counsels as a caring, kind, and sensitive person who personifies the Human Resources mission statement: *Creating an environment where people treat others as they would like to be treated*. His efforts have contributed to a successful alcohol and drug prevention program, and Mike was a key contributor to Space Systems' preventative testing procedures. His efforts and style contributed to more than 500 people using the EAP in 1990. This was a 19 percent increase over 1989.

Billy Eggert of Production Is Space Systems Division's 1990 Employee of the Year!



Billy Eggert
Production

After Corporate Vice President and Division General Manager Dr. Al Lovelace's speech at the annual State of the Division held on January 24, the spotlight of the event was shifted to the presentation of the nominees for the division's Employee of the Year.

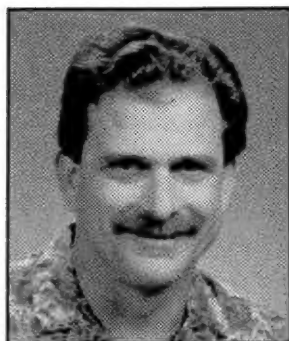
Bernie Kulchin, vice president of Human Resources, introduced the 12 nominees, giving their qualifications and accomplishments during the eventful year of 1990. Then Dr. Lovelace announced Billy Eggert as Space System Division's 1990 Employee of the Year.

Billy was selected as Production's Employee of the Year in recognition of his performance as production supervisor at Plant 19. This led to the higher award at the division level.

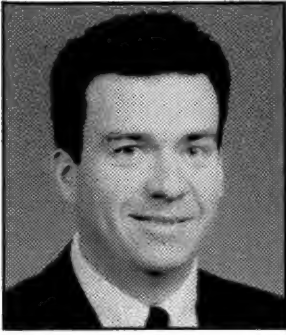
His primary responsibilities have been in two major areas: ten-foot diameter common and peculiar bulkheads for all programs, and fourteen-foot diameter bulkheads and skins for the Titan/Centaur Program.

Billy's major accomplishments were achieving MCS Recovery Position on six of nineteen assigned assembly items, supervising the aft bulkhead team that completed four thrust cylinder installations with zero defects including a span reduction from 40 to 16 days, reducing QAR rework hours by over 400 percent, improving performance to scheduled spans by 30 percent, implementing Employee Suggestions in excess of \$100 thousand in savings, implementing CRP savings in excess of \$1 million, and saving \$2 million as a PAT team member/leader.

The entire division is proud of Billy and offer him hearty congratulations for this well-deserved award and best wishes for future career successes.



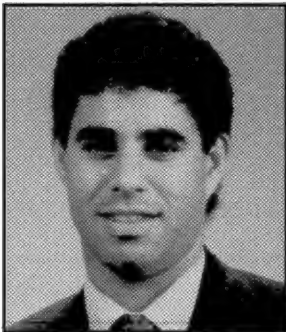
Mike Loffen, Facility Services — Mike received his award for his outstanding job performance as a journeyman plumber in Facilities. He has constantly demonstrated leadership, quality workmanship, community awareness, a team spirit, dedication to environmental concerns, a concentration on cost effectiveness, and many examples of individual initiative during 1990. His individual accomplishments have reduced costs and ensured production schedules were met. This included a \$115 thousand-per-year savings in the Tric recovery system filters and improvement in the Class 10,000 clean room reliability and Plant 19 welder chiller systems. He has also made conscientious and effective efforts in water conservation. Mike is hands-on and innovative, leading the way for the Maintenance Action Team and acting as supervisor in the supervisor's absence.



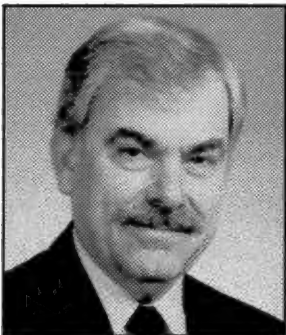
Lee Patterson, Business Development — Lee's award comes from positioning the division and Corporation for a new business win: the SSC Dipole Magnet project. This accomplishment represents a program potential greater than \$1.1 billion, with average sales of \$85 million through 1993 and \$195 million through 1997. Lee demonstrated outstanding leadership and management talents normally expected of people with higher levels of experience. He maintained a cohesive team throughout the proposal process, including periods of uncertainty, RFP delays, and customer turmoil. He carefully managed limited NBF resources pursuant to this proposal, which were graded Superior by the government Source Selection Evaluation Board.



Forrest "Butch" Seitz, Quality Assurance — Butch has made many important contributions to Space Systems during 1990. He directed the activity in the design, development, procurement, and implementation of filmless X ray. He provided the support and direction necessary to design, develop, procure, and implement the Laser Shearography system. Butch also directed the application of close-range industrial photogrammetry for the verification process, continually promoted Total Quality Management, and is manager of the Professional Development Program for the division's chapter of the National Management Association. In his current position, Butch leads the group responsible for identifying, procuring, and implementing new quality technology into production applications for Space Systems' products.



Mike Simon, Advance Space Transportation Systems — Mike was the proposal leader for the mission, systems, and operations analyses of Space Station *Freedom* for NASA/Langley, a successful competition against the incumbent space station contractors. He led the team that analyzed space exploration alternatives used in key discussions with the National Space Council and Stafford Commission. In what spare time he has, Mike authored and presented technical papers at a number of national and international conferences as well as providing informational and promotional talks in the community, especially at schools. Mike is a capable, dedicated professional who produces for the division and helps it attain its new business goals. He also takes an active role in bettering and improving the entire Space Systems team.



Norm Viste, Research & Engineering — Norm contributed to the successful AC-69 flight by being the "quarterback" of this tremendous team effort — particularly by solving the excessive acoustic problems when the vehicle was on the launch pad. He was also highly instrumental in the effective resolution of numerous critical technical issues faced in R&E, and he participated in the culmination of Atlas II, IIA, and IAS design efforts. Norm's relentless pursuit of acceptable solutions to the myriad technical issues resulted in a superior Atlas I product which provides the foundation of our division's continued prosperity.



Jeff Williams, Atlas Program Office — Jeff's major achievements in 1990 included formulating and implementing innovative workaround plans to solve schedule problems, and cost-effectively resolving engineering/manufacturing discrepancies. He enhanced our tube fabrication process by relieving tolerances at the detail level to improve yield by 900 percent. Jeff resolved conflicting matched hole pattern requirements between Engineering and Tooling by establishing the previously proofed tooling as the controlling requirement, thereby eliminating an apparent discrepancy and the costs needed to fix it. Jeff is a recognized and effective leader in the Atlas Program and, through his professionalism, has initiated many projects that have saved Space Systems millions of dollars.

Dr. Lovelace Delivers Candid 1990 State of the Division Speech at January's Special NMA Meeting

Dr. Alan Lovelace, corporate vice president and general manager of Space Systems Division, delivered his sixth annual State of the Division address to a crowd of over 1,000 Space Systems employees at the Town & Country Hotel on January 24. Dick Hora, vice president of Planning, Facility Services and International Programs, was the host for the event which was sponsored by the division's chapter of the National Management Association.

The theme of this year's presentation was "The Road Ahead." Dick Hora opened the evening by asking the guests to prepare themselves for the flight ahead and introducing their pilot for the evening, Dr. Lovelace. Dr. Lovelace began by taking a look back at the paths traveled in 1990. He congratulated the employees on a job well done, stressing the many successes achieved by the Space Systems team. These included three successful Atlas launches, delivery of the first Titan/Centaur flight article TC-8, success of the Commercial Launch Services team in securing new launch service contracts (bringing to 43 the number of firm launch commitments), and the win of the Superconducting Super Collider dipole magnet program. He noted changes at the corporate office and the arrival of the new chief executive officer Bill Anders.

The focus then shifted to the road ahead, with an emphasis on 1991. Dr. Lovelace spoke of the financial challenges facing General Dynamics, noting that the corporation is counting on Space Systems more than ever before to provide a return on the corporation's investment.

To meet the challenging circumstances ahead, there will be a cultural change emerging this year throughout the corporation. "The first of these changes can be summed up in the word *stakeholder*," Dr. Lovelace said. "We all need to become true stakeholders in the future of our division and the corporation. We all have to be smarter, more innovative business people in our everyday activities. We are all partners in the launch vehicle, upper stages, and energy industries."

Dr. Lovelace went on to explain the second facet of the cultural change, summarized in the phrase *shareholder value*. Many of us fail to realize that some of our most important customers are the shareholders of General Dynamics stock. "It's all too easy to overlook the fact that it is the shareholders, through the corporation, who have invested over \$500 million in the future of Space Systems Division," commented Dr. Lovelace. In order to create value for the shareholders, Space Systems must build profitable, long-term businesses. The challenge lies in building a business that makes money year in and year out.

The first and foremost requirement in meeting that challenge is to build a quality product and provide a quality service. "The second requirement of a good business is the ability to be a reliable supplier to our customers," stated Dr. Lovelace. "To do that requires meeting the delivery and launch schedules to which we have committed." Lastly, any good business must be cost competitive. "We have got to learn to work smarter, not just harder, at our jobs," said Dr. Lovelace. "If we are able to meet or beat the cost goals we have set," he continued, "we will have more than good business, we will have outstanding business for years to come."

"A future is not created by elaborate business plans or by new buzzwords," Dr. Lovelace said. "It is created by people. People who work together to break down barriers, people who work as a team, and people who have the will to succeed."

Dr. Lovelace concluded his speech by telling the audience his definition of an optimist. "An optimist," said Dr. Lovelace, "is someone who knows that future holds surprise, and has the adaptability and capability to take advantage of new circumstances. When I'm with the people of Space Systems, I'm with a team of people that are capable of meeting the challenges ahead," stated Dr. Lovelace, "a group ready to seize the opportunities that come, and turn them into successes."

Work/Family Resource Center Relocated at KM

The Work/Family Resource Center (formerly the Child Care Resource Center) has moved to Kearny Mesa's Building 24, first floor, Human Resources' lobby area.

In addition to listings of more than 600 child care providers in San Diego, the Center has information on available community resources in areas such as commuting, elder care, prenatal care, work and family workshops, and other services.

It is open to both employees and their spouses and there is no need to be badged or escorted.

Employees located at Plant 19 also have access to information through the Convair Family Care Resource Center located at Lindbergh Field in the new cafeteria in Building 33.

Your suggestions and ideas for the centers are welcome. Call Susi Cowan at 44045 for child care provider information. For other work/family questions, contact Nancy Kimerly at 44110.

NMA Scholarships Open for 1991 Applicants

Nomination forms for the General Dynamics Space Systems 1991 National Management Association (NMA) Scholarship Awards are available.

Applicants must be legal dependents of division employees. The hopefuls are also required to be high school seniors (or no more than one semester out of high school). The deadline for submittal of applications is March 8, 1991.

Winners will be selected by the Scholarship Awards Committee based on a written application, transcript data, and an interview with the committee. The scholarship awards will be presented at the May NMA dinner meeting.

Last year Space Systems NMA chapter awarded six scholarships of \$2,000 each. The amount of the scholarship is dependent on the total contributions made throughout the year. Your support of the scholarship fund through NMA raffle ticket purchases at the monthly dinners enhance the amount of the scholarship awards.

For application information, please call Patty Pierson at 43963.

Pride in Our Service to the Community

GDSS Participated Actively in Community Relations in 1990

The San Diego, Cape Canaveral, Huntsville, and Vandenberg sites of Space Systems were busy, productive locales when it came to getting involved in serving their respective communities during 1990.

The division's donations, volunteer work, and services were all part of our efforts to provide benefits and help to charitable, educational, and cultural organizations devoted to a myriad of causes. The types of activities we supported included arts, community support, education, health, and youth.

Community support activities and education were the most active areas at all three locations.

In community support, for example, some of the highlights included: workshops to improve interviewing and resume skills, participation in the March of Dimes WalkAmerica, delivering speeches and lectures on the space industry to interested civic groups, supporting museums and science centers, participating in environmental concern activities, help in alcohol and drug abuse prevention programs, aid to needy families and children over the holiday season, blood drives, and gifts to troops in the Middle East participating in Operation Desert Shield.

In education, Space Systems employees visited schools not only to encourage students to continue their education, but to provide them with guidance to particular curricula needed to enhance career options. We also distributed educational materials, participated in career and science fairs, and offered grants to aid school teachers in pursuing educational program goals above and beyond their normal budgets. Space Systems funds and employees were also effectively involved in contributions and participation in minority small businesses, educational programs, and scholarships.

Along with time and money, Space Systems donated old software and computer equipment, printing costs, and other in-kind services to various organizations.

The pinnacle of these impressive accomplishments was our employees' dedication to volunteerism. Many of them provided non-profit organizations in their communities with their valuable time and talents. This generous devotion and concern for others amounted to an average of 40 volunteer hours a month per person. It was Space Systems' way of saying, "We care!"

Alda Jorgenson, director of community relations, said, "We were very pleased with our efforts in 1990. All of us in Space Systems can take great pride in our service to the communities in which we are located. It's through the efforts of every Space Systems employee that General Dynamics is viewed as a good corporate citizen. We can be proud of our accomplishments in the area of community relations."

In speaking of 1991, Alda stated, "This coming year will find the bulk of our community relations activities directed to educational causes and projects. In these times of budget awareness, we want to make sure our program dollars are spent wisely and effectively in that most important area. We will continue to support the volunteer efforts of Space Systems employees who will be out in their communities to give time and effort to organizations devoted to aiding the less fortunate among us."

Car Thefts and Pilfering Can be Prevented by Use of Caution

By Dave Walters, Industrial Security

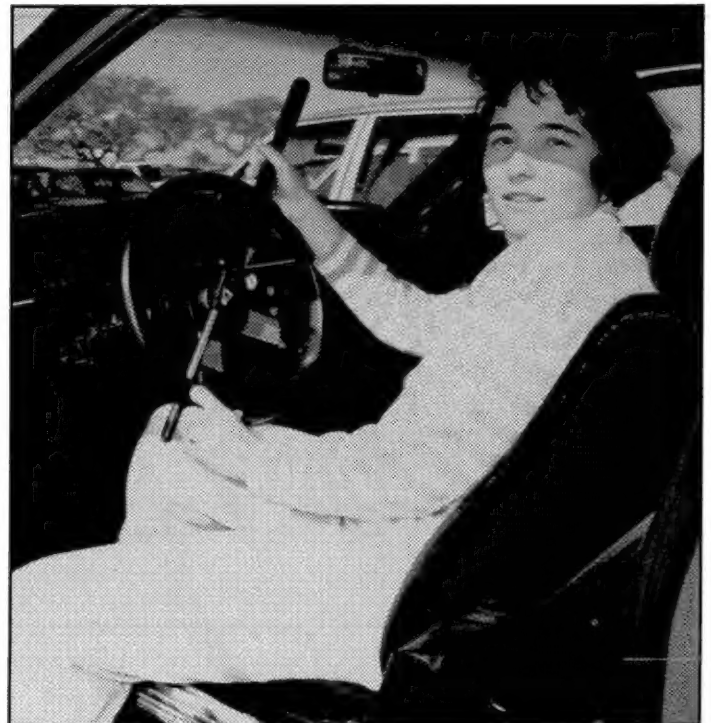
Statistics show that professional car thieves can break into a vehicle and drive it off in less than two minutes time. In spite of this criminal expertise, however, thefts in our parking lots are preventable.

Every employee can help reduce car thefts and pilfering by getting involved and reporting any unusual incidents or suspicious individuals loitering in the parking lots. Suspicious activity should be reported directly to the Emergency Control Center (ECC) at the Kearny Mesa Facility at 73101, or at the Plant 19/Harbor Drive Facility at 26556.

In addition, employees are reminded that they can do the following to prevent becoming an easy target of theft:

- Ensure that your vehicle is locked and the windows are rolled up.
- Secure all loose items in locked compartments, thus keeping all valuable such as cassette tapes, compact disks, etc. out of sight.
- Install a car alarm, or if price is a factor, purchase an inexpensive steering wheel lock.
- Inform the ECC prior to allowing anyone to work on your vehicle while it's on company property.
- Inform the ECC if your vehicle will remain on company property overnight.

Remember: Thieves know most of the hiding places for that extra set of car keys. If every employee thinks security, all vehicles will be waiting for their owners at the end of shift.



Tracy Witry of Industrial Security demonstrates a steering wheel lock. This device is considered one of the most dependable car theft prevention devices on the market.



February 8, 1991

Transport of AC-70 Tests Ingenuity, Skill, and Humor on a Long Truck Drive

January 7, 1991 was a launch day at Vandenberg, but there was neither a tension-filled countdown nor blast of rocket engines as this mission got under way. Instead, a diesel engine turned over, gears clashed, and the hammer went down, Good Buddy!

This mission involved a moving spacecraft, but it wasn't doing so under its own power. AC-70 had been placed on a heavy-duty trailer to be hauled cross-country behind a truck to Cape Canaveral.

In the past, Atlas has been loaded in a C5A aircraft at Miramar Naval Air Station in San Diego for the flight to the Cape. But the demands of Operation Desert Storm on the Air Force's squadrons of heavy cargo aircraft left none available. So the decision was made to go by truck.

Preparation was the first order of business, and it was by no means easy. Arrangements had to be made for truck and trailer, personnel were assigned to the task, and coordination had to be made with each state the truck would pass through. It took 11 people to see the job through. Five Space Systems employees were assigned to the mission. They were Norm Bobczynski, route supervisor; Mark Wright, Quality; Jim Emanuel, mechanic; Julio Romero, mechanic; and Harvey Ennis, Move Safe. Six other people from the commercial trucking company made up the remainder of the intrepid crew. After a couple of short dry runs, the truck and escort vehicles, determined and resolute, roared out of Vandenberg Air Force Base bound for Cape Canaveral and glory.

The nine-day trip encountered several tight turns, narrow two-lane highways, rough roads, and low-hanging tree limbs. The crew ran into a curfew in Mississippi that prevented them from traveling there on Sunday. On Monday a friendly and curious Alabama state trooper stopped the caravan. He was given a briefing, then he allowed the Atlas to proceed.

Finally at 11:55 a.m. on Tuesday, January 15, the AC-70 arrived at the Cape — mission accomplished!

Security Awareness Is Everybody's Business

Space System's Director of Industrial Security Ron Davis wants all employees to be aware of and to participate in the increased emphasis on security practices and procedures within the division.

"The best way for our facilities security to be effective is through everyone's participation," Ron said. This can be done individually by cooperating with guards at facility entrances. At off-site facility locations where there are no turnstiles, hand your badge to the security officer. When wearing the badge, display it in the proper manner on the front left side of the upper body or on a chain hanging from your neck. The name and picture must be clearly visible.

If you see anyone without a badge, immediately challenge him or her. He or she is in the wrong, not you, in that situation. Visitors displaying badges with "escort required" notations must be escorted by an employee at all times.

In our pursuit of excellence in security there will be more rigorous inspections of parcels, briefcases, and purses. Be prepared to open any container you are carrying for examination.

Receptionists and plant protection officers can no longer accept outside deliveries such as flowers or gifts.

If you have any questions during working hours, call Industrial Security at 44622. After hours you may contact the Emergency Control Center at 573-3101.

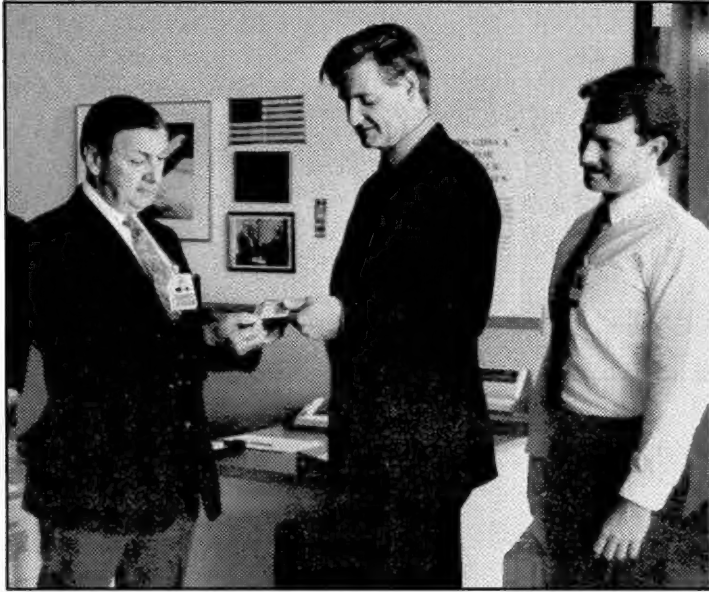
(More Security Information on Page 2)

Software Donated to Historically Black College Program



Tom Georgi and Kris Buitenhek of Information Resource Management oversee the loading of 22 boxes of used computer software recently donated to Trenholm State Technical College of Montgomery, Alabama, an HBCU (Historically Black College or University) institution.

Division Security Is Intensified through Heightened Awareness



An employee entering CP2 complies with the new security requirements by removing his badge and handing it to the plant protection officer.

Why do I need to challenge someone whose badge is not showing when I know who they are?

Each employee is required to wear his or her employee badge at all times when on the premises. While you may know the person, many others do not. Our policy is to have the badge worn on the upper left portion of the body with the picture and name visible. This provides for a positive identification.

What should I do when I find someone who is not wearing his or her badge?

If an employee is not wearing a badge in the facility, you must do one of two things: if the employee is near his or her work area, escort the person to his or her supervisor; or if you are near a facility entrance, escort the person to the plant protection officer, who will call for the person's supervisor.

Why are the guards wearing guns?

Because of the media attention received on the performance of the Tomahawk cruise missile in the Persian Gulf War, qualified and certified General Dynamics plant protection officers are armed at the entrance of San Diego facilities.

What are we doing at our Viewpoint Plaza, Century Park, Daley Center, and Balboa facilities to ensure enhanced security?

At all facilities without turnstiles, there are now two security officers who physically inspect badges upon entry. Patrols, as well as more thorough inspections, are taking place at all offsite facilities.

Could I be fired or suspended for a security violation?

Depending on the severity of the violation, it could result in disciplinary action up to and including termination.

What is meant by the term *heightened awareness*?

As it applies at General Dynamics, heightened awareness refers to our increased commitment to protect the safety and security of our work force, facilities, and products during this time of war.

A Convair plant protection officer uses a mirror to inspect the underside of a truck about to enter the facility. The driver is opening the vehicle's tool chest for inspection in this good example of heightened awareness.



Armed guards making rigorous inspections of briefcases, parcels, and purses are all part of heightened awareness.



Inside Space . . .

Yuma, Arizona police are interested in talking to a General Dynamics employee who had personal property stolen during the holidays. If this involves you, call **Bob McAnelly** of Convair Security at 38200. . . . **CCAFS employees** raised over \$4500 for the **1990 Needy Family Christmas Fund**. Twenty-five families received boxes of groceries and gift certificates for perishable food. Books were included this year as additional gifts to families with children. . . . Newly elected San Diego County **Sheriff Jim Roache** knows how to recognize talent in others. He has asked Space Systems' **Dennis Bartlett** and **Ron Davis** to serve on his Advisory Transition Team to help rebuild effectiveness and pride in the Sheriff's Department. . . . **Gate Seven** at Kearny Mesa has been permanently closed and relocated to the lobby of **Building 24**. In addition, the hours of the lobby in **Building 2** have been changed to 6 a.m. to 6 p.m. Monday through Friday, and 6 a.m. to 4:30 p.m. on Saturday. . . . It's **WalkAmerica** time again. Watch for more details on this upcoming **March of Dimes** event. . . . **Don Seymour** was the Safety Slogan award winner at Cape Canaveral for the fourth quarter of 1990. His winning entry was *I Am Safety*. . . . Speaking of folks thinking of safety, the winners of the San Diego 1990 Safety Contest have been announced. The winning department were: **Failure Analysis, Manufacturing Engineering Management, Material & Processes, On-Board Producibility, Tool Design, Space Assembly Planning, and Space Manufacturing Engineering**. . . . Space Systems employment total for the week ending January 25, 1991 was 4,682.

Promotions

Congratulations to these people who received promotions.

Steve Arnett	Joyce Gossett	Karen Rivera
Craig Baird	James Guy	Lisa Roback
Dave Baszak	Olivia Hill	Nancy Rose
Aurora Bravo	Mark Huston	Joanne Rufing
Eric Brunner	Jo Rae Inman	Gerry Schipper
Lori Burnett	Joseph Johnson	Richard Scott
Loretta Crill	Jeffrey Keats	Kevin Sheahan
Gayle Croft	Michael Klein	Marilyn Sherman
Wayne Crow	Jack Koon	George Shields
Jerry Davis	Lisa Lawrence	Thom Shulok
Barbara Dawson	Mark Levesque	Pearl Simmons
Susan De Gaetano	Steve Mally	John Smith III
Todd Dolezal	Kathleen Martz	Timothy Taylor
Cathey Dowdle	James McGeeney	Kahn Travis
Ralph Ellison, Jr.	Jill Moeller	Stan Turner
Mark Emerson	Ray Moreno, Sr.	Dave Walters
Gordon England, Jr.	Patricia Oliva	Paul Watrous
Susan Fitch	Patrick Owen	Paul Webber
Leanne Foley	Walter Phillips, Jr.	Randy Williams
Timothy Fowler	Richard Pollock	Elizabeth Yaneza
Dana Frizzell	Jim Risch	Reza Zarei

Suggester Ideas Net GDSS Big Savings

Space Systems employees have been keeping the Employee Suggestion Review Board busy evaluating recommendations of how to do our work better. The board reviews and approves all implemented suggestions designed to save over \$50,000.

Recently, employee innovation netted the company over \$280,000 in savings.

Christine Biel in Quality Assurance had two of the five successful suggestions reviewed. Her first was to reduce the number of relays used in destructive parts analysis from five to two. She had to convince Parts Engineering the sample size of two is sufficient to verify the integrity of the manufacturing process. This netted the company a yearly savings of \$41,793. Christine's second suggestion was to delete the requirement of x-raying relays since the procedure shows only metallic contamination and cannot determine proper internal construction or adequate clearances. This will save \$6,345 a year.

A change in the method of fabricating tabletop tools and tool bases by casting the tabletop and support base into a single, integrated unit was the suggestion submitted by Todd McClean of Production. Todd's idea will save the division \$101,500 annually.

Joseph Narde of Quality Assurance came up with an idea to change our Quality Assurance policy requirement for supplier surveys that netted \$37,968 a year.

Robert Whaling in Space Production Final Assembly thought the method for cutting pillows in acoustic panels could be improved. He proved his point by designing the part to be made in one piece rather than cut out in six different pieces. That idea was good for a cost reduction of \$93,168 per year.

These four employees give ample evidence that innovation and imaginative approaches to work methods and procedures are alive and well at Space Systems Division.

Personal Problems Getting You Down? Here's a Plain and Simple Solution

By Mike Felchlin

You and your spouse have reached a point where communication has completely broken down. You feel you've lost control regarding your son or daughter. Alcohol and/or drugs are beginning to disrupt the life of a family member and yourself. Someone significant to you is now out of reach.

What areas of service does the Employee Assistance Program offer?

- Family and marital counseling
- Dependent concern assistance
- Treatment options for alcohol and chemical abuse
- Financial and legal referrals
- Stress management

How do I contact the EAP?

- Contact the off-site consultants: National Resource Consultants at 291-0330 in San Diego or 1-800-999-7222 in all other areas.
- Call your EAP administrator Michael Felchlin at extension 68880 for further program information or to help answer any additional questions you might have.

Is the EAP confidential and will my supervisor be told of my problem?

- When you make contact with the EAP on your own (a self-referral), absolutely no one is told of your admission to the program or your problem without your written consent.

Will I be able to afford the services provided through the EAP?

- All services provided with the EAP are free. Even if extended treatment is required, the employee's ability is taken into consideration before a referral is made to a community provider.

Employees are this division's most valuable resource, and the whole purpose of the Employee Assistance Program is to help employees when needed.

Retirees

Thanks and good luck to these Space Systems employees who recently retired:

Clarence Lucas, Research Test Lab, Material and Processes, 33 years

Bobby Mallett, Engineer, Senior, RF & Data Acquisition System, 13 years

Ivan Simmons, Industrial Electrician, Special Status Employees, 8 years

Claude Woods, Research Test Lab, Material and Processes, 34 years

Special Feature to Return to *Orbiteer*

Until a few months ago the *Orbiteer* carried a column that featured individual employees, how they work with others to produce superior products, and other newsworthy information about our people.

This feature will reappear, but with a difference. Along with individual recognition, we will showcase the Space Systems team spirit by writing about groups of employees and what they are accomplishing as teams.

If you have any suggestions of above-average individuals or teams to publicize, please send them to Patrick Andrews at MZ K1-7000.

Space Systems People Serve in Desert Storm

Space Systems Division granted military leave to ten employees when their reserve units were called to active duty to participate in Operation Desert Storm in the Middle East.

Those who are away and serving in the armed forces are:

Jack Funkhauser, San Diego, captain, Marine Corps Reserve

Reynaldo Garza, Harlingen, staff sergeant, Texas Army National Guard

Michael Gillis, San Diego, staff sergeant, Marine Corps Reserve

Jose Gutierrez, San Diego, seaman, Navy Reserve

Bernard Kozlosky, San Diego, petty officer 2nd class, Navy Reserve

Steven Mettar, Cape Canaveral, specialist 4th grade, Army Reserve

Ken Robinson, San Diego, major, Army Reserve

Gary Snyder, San Diego, seaman, Navy Reserve

Abraham Wehby, Cape Canaveral, staff sergeant, Air Force Reserve

Carl Welch, Vandenberg, staff sergeant, Air Force Reserve

We wish these servicemen the best of luck and a speedy return to their families and careers.

ORBITER
GENERAL STANDARD SPACE SYSTEMS DIVISION

The Space Systems Division *Orbiteer* is published every other Friday. Items of interest to readers should be addressed to:

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ORBITER

GENERAL DYNAMICS SPACE SYSTEMS DIVISION

March 8, 1991

We Need Your Help!

WalkAmerica 1991 Is Rolling into High Gear!

The good people of General Dynamics are literally putting their best foot (feet?) forward for WalkAmerica 1991 on April 27 in this fundraiser organized by the March of Dimes.

WalkAmerica funds much of the fight against birth defects, the nation's number one child health problem. Each year one quarter of a million babies are stricken with birth defects, of which there are more than 3,000 types.

By becoming a member of the General Dynamics WalkAmerica team, you will help make it possible for our nation's infants to begin their lives healthy and strong. Last year General Dynamics made a significant contribution to this March of Dimes mission by raising \$48,000.

The Space Systems' WalkAmerica 1990 highest fundraiser was Mike Austin of Mail Management Services. Mike crossed the finish line with \$2,600 to help fight birth defects. His strong 1989 effort brought in \$1,800. Mike's achievements were officially recognized at a special ceremony held by the San Diego/Imperial Chapter of the March of Dimes Birth Defects Foundation.

Mike's enthusiasm is stronger than ever. "I hope to beat my 1990 efforts," Mike said. "My ultimate goal is to top \$5,000. But, no matter, I fully intend to participate to the best of my abilities."

General Dynamics needs team leaders for the 1991 WalkAmerica. If you would like to participate, call the division WalkAmerica coordinator, Patrick Andrews, at extension 43234. A team leaders' breakfast is scheduled for Tuesday, March 26. There they will receive more information.

Once again, General Dynamics will be giving out specially designed T-shirts for walkers and volunteers. The front of the shirt sports a sneaker print fresh with splotches of paint, and the General Dynamics name. The back displays the WalkAmerica logo. The T-shirts have always been the hit of the event. Even people from other participating companies ask for them.

Don't forget to bring your families, friends, and neighbors to join the General Dynamics team on April 27. Look for more details in upcoming issues of the *Orbiter*, on posters around the plant, and in special announcements.

The award pictured here was given to General Dynamics for placing ninth nationally in raising money to fight birth defects through the March of Dimes' 1990 WalkAmerica.



Unions and Management Share Ideas and Concerns in Workshops

The successful and mutually beneficial conclusion of the Cape Canaveral collective bargaining agreements between Space Systems and both the International Association of Machinists and Aerospace Workers, and the International Brotherhood of Electrical Workers reflects the open rapport between division management and the unions.

Management and union leadership continue to improve two-way communications. This is aptly demonstrated by jointly facilitated workshops and roundtable discussions.

One such session occurred when Rick Sandler, manager of Employee Relations, went to CCAFS to present the new agreement language. Rick explained its effect on Florida operations and what it means to the workforce.

Union and company representatives attended a workshop facilitated by the Federal Mediation and Conciliation Office. They studied techniques to improve interpersonal skills and to enhance leadership styles and abilities.

As a direct result, local union and management leadership joined by executive management from San Diego held a roundtable discussion to share ideas and concerns about improving Space Systems' business posture.

To Launch DoD's Main Communications Satellite

Atlas 101 Rolled Out at Vandenberg AFB



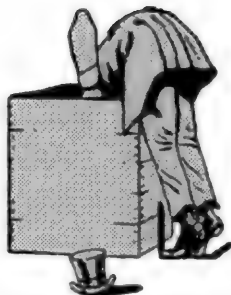
Vandenberg Air Force Base was the scene of the rollout of the first Atlas II booster, Atlas 101, on February 15. The event, attended by more than 200 people, was hosted by Chuck Harter, VAFB director, who opened the ceremony.

Ben Wier, division vice president and Atlas program director, spoke of the hard work and dedication of GD employees who make the Atlas one of the highest quality boosters in the world. Colonel Bill Files, program director of the Launch Programs Office at Air Force Space Systems Division, stated, "The team here at Vandenberg has been totally dedicated to quality, and that quality is right behind me."

The keynote speaker was Colonel Orlando Severo, commander of Vandenberg Air Force Base. Colonel Severo said, "The Atlas is a vehicle that has kept up with the increasing demands of our modern space requirements."

Atlas/Centaur 101 will launch the Department of Defense's main communications satellite, DSCS III, into orbit later this year. Space Systems is under contract to launch ten of these satellites for the Air Force through 1997.

Looking for more pages in this issue?



We're running a bit short this week because the editor is on medical leave. We will be back to our regular four-page format in the next issue.

ORBITER

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San Diego, CA 92186-5990
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Space Systems employment total for
the week ending February 22, 1991
was 4,646.

Heightened Security Awareness Continues

As set forth in the February 27, 1991 issue of the *Los Angeles Times*:

The threat of terrorism is expected to increase if the Gulf War ends in humiliating defeat for Iraq. A top State Department official reported a sharp upsurge in terrorist incidents — more than three times the usual number — since the start of the war against Iraq. Most of the incidents primarily resulted in property damage.

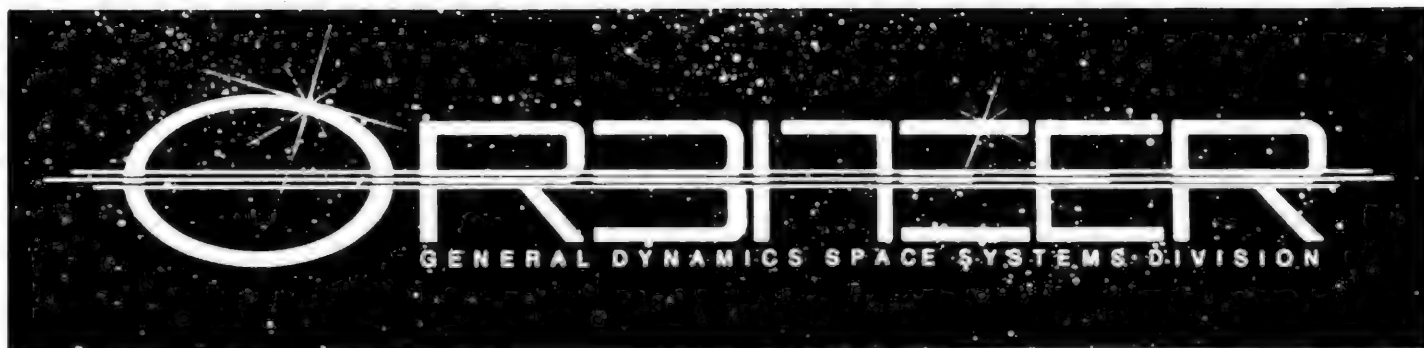
"The threat of terrorism will continue in the future," said Morris D. Bushy, coordinator for counterterrorism. "There has been an aftermath of terrorism to every conflict in the Middle East for the last three decades, and although we hope it will not be the case in this one, we must assume and plan for the worst."

Creating a safe and secure workplace is a primary goal of Industrial Security. However, plant protection officers cannot be in all places at all times. They require your assistance in maintaining a safe environment.

Observance of the security measures listed below will enhance the degree of personal protection afforded you and other employees:

- Report any suspicious activities or objects (i.e., unidentifiable or suspicious package) to Industrial Security.
- Wear your employee badge at all times while in the facility. When departing company premises, remove and properly safeguard it.
- Challenge individuals within the facility who do not possess or are not properly displaying an employee or visitor badge.
- Identify yourself to any member of management or plant protection officer upon reasonable request.
- Honor a plant protection officer's request to search your parcels, packages, lunch containers, briefcases, handbags, or purses being taken into or out of the facility.
- Do not use your employee badge as identification outside the company.
- Do not permit another person to use your employee badge to enter or leave the facility.

If you have any questions or concerns, please contact Industrial Security at extension 44622.



March 22, 1991

Job Search Help Offered

Career Transition Center Ongoing at CP5

The four San Diego divisions of General Dynamics established a Career Transition Center (CTC) in September 1990 to assist employees affected by our reduction-in-force (RIF).

The CTC is managed by Sue Dehesa of Space Systems Human Resources, who is representing all four divisions. The center, located on the second floor of CP5, offers a full line of services including job search strategy and resume preparation counseling, word processing services, a reference library, and work space equipped with phones to facilitate a nationwide job search.

The CTC's activities have also included an on-site job fair at the Convair Recreation Center Auditorium. General Dynamics job fair participants were enthusiastic about the event. Two hundred and seventy-four employees affected by the reduction-in-force attended.

Eight San Diego employers with current job openings participated. They were Cubic, Jaycor, Loral Conic, Orincon, RD Instruments, SAIC, Scientific-Atlanta, and Titan Corporation. These companies report that interviews are continuing and a number of job offers are soon to be finalized.

Representatives of the participating companies indicated they were very impressed with the candidates they met and felt their skills matched the companies' requirements.

The CTC plans to host future job fairs to further facilitate direct contact between GD employees affected by the reduction-in-force and the hiring community.

Debra Faulk Nominated for GDSS TWIN Award

Debra Faulk, the small business administrator in the Material Department, has received Space Systems Division's 1990 nomination for the Tribute to Women and Industry award.

Debra was the primary force behind Space Systems' outstanding accomplishment in exceeding, for the first time in the history of the aerospace industry, the government's five percent Small Disadvantaged Business goal. In addition to her responsibilities as a small business administrator, Debra is also the division coordinator with the Small Business Administration, the Supplier/Employee Recognition coordinator, the department cost reduction administrator, and the department training coordinator.

Debra was chosen from a field of six candidates for this award, which is a nationwide program of the YWCA. The purpose of TWIN is to honor women who have made a contribution to industry in managerial, executive or professional roles, to honor firms who provide opportunities for such women to reach their full potential, and to encourage women to prepare for a wide range of professional opportunities in business and industry.

The other nominees for the honor were Rita Bermudes, IRM/MRP2; Alda Jorgenson, Human Resources; Amy Koon, Research & Engineering; Karen Lundeen, Titan/Centaur Program Office; and Jennifer Roney, Finance.

*Roy Bennett,
division vice
president of
Material, presents
Debra Faulk with
the certificate
announcing her
nomination as
Space Systems'
representative in
the Tribute to
Women and
Industry (TWIN).*



**Put your best foot forward and help fight birth defects in the
March of Dimes'
WALKAMERICA 1991**

Call Patrick Andrews, Space Systems Coordinator, at 43234 for details

Retirement, RIF, and Voluntary Terminations

Mover Offers Special Rate to GDSS Ex-Employees

Mayflower Moving & Storage has a special corporate discount package it is now offering to all Space Systems employees who are planning inter-state relocations due to either reduction-in-force, retirement, or voluntary termination.

The package features a 47 percent discount rate and includes all moving services such as packaging of materials, delivery of goods, and storage. There are no quantity restrictions. The carrier will, however, require users to provide a means of clearly identifying themselves as past employees of Space Systems.

This agreement was arranged through the efforts of several individuals including Arlin Brown of Traffic, representing Space Systems, and Beverly Peabody of Mayflower Transit/Aero Mayflower.

Those interested may contact San Diego Van and Storage at 800-854-7024 to discuss the move. Although this special offer is only for relocations outside California, the mover will also offer reasonable rates for moves within the state.



Ready to Roll! Celebrating the agreement between Space Systems Division and Mayflower Movers that netted a 47 percent discount for ex-division employees are (left to right): Pearl Simmons and Debi Ward of Human Resources; Arlin Brown from Traffic; E.C. DeBolt, president of San Diego Van & Storage; Dean McGill, sales rep; and driver Bernell Hayden.

CRA Is Set for the Annual Easter Egg Hunt

It's that special time for kids again. CRA has announced its annual Easter Egg Hunt to be held on Saturday, March 30. The gates open at 10:00 a.m. and the hunt will begin at 10:30.

Children will participate in the hunt in three separate locations, based on their ages:

1-3 year olds will have eggs given them by "Easter Bunnies" inside the Pavilion. The toddlers should be on the west side of the Pavilion at the starting time.

4-6 year olds will look for eggs on the softball field behind the tennis courts. The field will remain closed until 10:30.

7-10 year olds will look for eggs in the main park. No eggs will be hidden until just prior to the hunt at 10:30.

In addition to the Easter Egg Hunt, there will be free train and carousel rides, a moon bounce, children's games, and a young child activity booth. This will all take place between 11:00 a.m. and 3:00 p.m.

For those who have worked up an appetite, the snack bar will also be open. Food will be served from 11:00 a.m. until 4:00 p.m.

There will be plenty of fun for the whole family until the park closes at dusk.

Inside Space . . .

Space Systems' Dr. Doug Armstrong was commended by the American Institute of Aeronautics and Astronautics for his contribution to the National Aeronautics and Space Administration's outreach program entitled *Innovative Technologies for the Exploration of Space*. . . The 37th Annual Greater San Diego Science and Engineering Fair will be open to the public on April 11-14 at the Federal Building in Balboa Park. For more information call Dick Bethel at 78957. . . There is a new phone number and location for the Employee Assistance Program as of March 21. The office is now in Century Park Building 2 on the second floor. The phone number is 547-7570. The external number (National Resource Consultants) remains the same, 291-0330. . . Space Systems employees continue to keep the patent office busy. Recently Dr. Lowell Rosen of the Advanced Space Systems Technology Group had a patent issued for his invention titled *Holographic Communications Device and Method*. Ted Stern, Mickey Cornwall, Jon Lawrence, and David Peterson of Advanced Avionics and Advanced Structures Groups, filed a patent application on their invention *A Deployable Retractable Photovoltaic Concentrator Solar Array Assembly for Space Applications and Method of Fabrication*. Not to be outdone, over at the Advanced Avionics Systems Group, Stan Maki had a patent application filed for his invention titled *Method and Arrangement of Integrating Global Positioning System and Inertial Navigation System without Using Accelerometers*. . . Space Systems employment total for the week ending March 8, 1991 was 5,069. This count now includes Harlingen.

3/22/91

Cape Canaveral Blood Drive Set for March 26

Cape Canaveral Air Force Station's Central Florida Blood Bank Drive is scheduled for Tuesday, March 26.

The goal for this year's drive is 70 donors. In addition to increasing available blood supply, those participating will help build Space Systems' reserve account. A reserve account functions much like a bank account, with one unit of blood equaling one credit. Employees and their immediate families are eligible to receive blood replacement credit from the division account.

The need for blood never ends. Save up to five lives with only one pint of your blood. For more information contact Michelle McIntire at 853-5885.

Plant 19 Phone Numbers Go Through Change

Effective Saturday, March 16 the telephone numbers at Plant 19 were changed.

In-plant dialing extension 25XXX became 23XXX. Outside callers will dial 542-3XXX.

Please notify business associates of any new numbers. If you have any questions, contact Linda Sharp at 77677.

Division to Receive DSD-WC Handbook

In April, Data Systems Division-Western Center will distribute a helpful handbook to Space Systems users of DSD services.

The handbook was created in response to results of the 1989 DSD Customer Service Survey. In the survey, customers indicated a strong interest in a handbook describing DSD's services. This booklet is a handy reference providing information on whom to call at DSD for computer needs.

The handbook will be mailed directly to GDSS supervision, IRM, ISSC members, and training coordinators. This mailing will also include participants in the Customer Service Survey. For extra copies contact Rita Bermudes at 77557 or Le Shema Brandon at 43232. Further information can be obtained from Sue Gillingham at 33513.

Promotions

Congratulations to these people who received promotions effective December 1990.

Al Acuna
Waldek Adamek
John Ali
John Arkwright
Sandra Backus
Kathryn Bailey
Merritt Barber
Christine Biel
Robert Bies
Tim Blazer
Paul Bomgardner
Bob Brooke
Diane Brown
Diane Brownson
Rosemarie Burns
Morgan Campbell
Maria Cappuccio
Jesus Carreno
Pierre Chammas
Joseph Che
Jeff Clawson
Robert Cook
Barbara D'Aversa
Don Daily
James Daube
John Dean
Janet Dixon
Paul Doty
Mike Dubreuil
Pilar Dunn
Lisa Eaton
William Eggert
Jim Engel
Conrad Everts
Lee Finkel
Mike Fitch
Charlie Flores
Aaron Fortson
Elizabeth Frey Delaney
Candy Giandana
Allen Gilliam
Becky Goffar
Francesca Gosser
John Gould

Gregory Griffen
Ellen Gurland
Pamela Harvill
Pat Hebert
Mike Henson
Tom Hornsby
Sharon Hughes
Michael Jacobs
Bruce Jahnke
Diane Jarlowski
Michelle Jenny
Don Johnston
Chris Karnes
Kevin Keierleber
Cinda Kemper
Neal Kerr
Leslie Kessel
Randy Kingrey
Bob Kish
Leslie Kortopates
Michael Labbee
Katherine La Borde
Beth Littlefield
Sharon Martinez
Todd McClean
Tammy McManaman
June Mendenhall
Jeanne Miller
Darlene Montijo
Edward Moore
Leon Moore II
James Moultrie
Terry Nehls
Len Neiman
Kurt Nelson
Lee Newby
Diana Newland
Catherine Nuccio
Laura Olsen
Janet Padua
Rob Painter
Greg Pate
Carla Peak
Charlynn Pecce
Laura Peck

Dam Pham
Patty Pierson
Greg Plamp
Mostafa Pourmand
Pat Quisenberry
Lois Raile
Steve Rambo
Pat Retoriano
Jack Rubidoux
Javier San Roman
Patricia Santi
Tim Sayre
Angelo Schiavo
Keith Schick
Alecia Scott
Edna Seggie
Richard Sides
Van Simmons, Jr.
Bob Simnitt
Stacy Slaten
Sandra Sloan
Roman Sroka
Frances Stanko
Darren Steiner
Kelly Stephenson
Greg Stoice
Barry Stout
Dianne Swanson
Sohail Taqui
Barry Taylor
Bonnie Tesar
Dan Thompson
Bill Tracy
Frank Tyler
Cheryl Van Wormer
John Vester
Deanne Vigliotti
Tracy Walters
Matt Wieland
Jim Wilk
George Willard
Lori Williams
Karen Wood
Mike Wurst

Don King Is CCAFS 1990 Employee of the Year

Donald King of Material Operations was named the Base Director's Employee of the Year on Wednesday, February 6.

Don was instrumental in meeting the critical schedule demands for the modification and refurbishment of SLC 36A and 36B. He was also responsible for expediting all critical airborne and ground support equipment parts for the checkout and launch of AC-69. His continuing concern for the welfare of the company and his fellow employees provides a valuable example for everyone at the Cape.

Ben Wier, division vice president and program director of Atlas Programs, was on hand to congratulate Don and the other employees nominated for the honor.

The nominees from each function were introduced by CCAFS staff members. These deserving people and their accomplishments are as follows:

Patricia Whisenant — Human Resources. Pat was instrumental in the development and implementation of an alternative medical insurance plan and a preretirement seminar workshop for the CCAFS workforce.

Dave Rodger — Atlas I/II Launch Operations. Dave's devotion and accomplishments on the conversion of SLC 36A's Shuttle/Centaur test stand to Atlas/Centaur launch capability and to our MLV II program specifications typify his outstanding performance during 1990.

Sheri Kunash — Quality Assurance. Sheri was a major contributor before and during the launch of AC-69. She spent many hours on nondestructive testing and on problems in the Centaur pneumatics and propulsion areas.

Mark Stricek — Site Support. Mark received the largest employee check to date at CCAFS for his suggestion entitled "Fabrication of a Twisted and Wrapped Cable," which netted an annual savings of \$203,981.12.

Neil Westerberg — Engineering Services. Neil motivates those around him while concentrating his efforts on reducing costs while improving production and quality.

Gene Hart — Titan/Centaur Launch Operations. Gene has been a major contributor to the Titan/Centaur mechanical hardware buildup and its installation in the Vertical Integration Building and SLC-41. He was also the prime customer interface.

Small Business Program Rated "Outstanding"

Space Systems Division's Small Business Program received an "Outstanding" rating from the Department of Defense and the U.S. Small Business Administration on February 11, 1991.

Mr. R.W. Hodby, deputy for Small Business, presented the award to Dr. Al Lovelace. Mr. Hodby stated, "I am very pleased with the level of efforts that are being made to achieve the five percent minority goal mandated by Congress. Space Systems has achieved 6.4%. This increase of small business dollars is a credit to your management concepts in the outreach, special assistance, and training programs."

This recognition resulted after an extensive review conducted by local representatives from both government agencies. This included close looks at solicitations and awards, training programs, compliance with reporting and documentation procedures, the outreach program, and other aspects.

If Space Systems continues to demonstrate top level commitment and maintains a proactive posture with this program, the division will have an opportunity to be exempt from the annual Small Business Program compliance review.



66-inch aluminum-lithium payload adapters like this one being assembled at Space Systems' Harlingen facility will securely hold the Hughes UHF follow-on and EHF mission satellites on their ride into orbit atop our Atlas/Centaur boosters beginning in 1992. This is the first expendable launch vehicle flight article to be fabricated from this low density alloy. Pictured front to back are: Thomas Aceto, Clifford Sherwood, and Joe Casares all of Harlingen.

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May 3, 1991

AC-70 Launch Fails, Investigation Begins

Space Systems launch of Atlas/Centaur 70, carrying the Japanese Broadcasting Corporation's BS-3H communications satellite, was halted when the Cape Canaveral Air Force Station's range safety officer terminated the mission on April 18.

A flight anomaly developed with the Centaur upper stage and it became apparent that the launch vehicle was not following the prescribed mission trajectory.

The AC-70 Failure Investigation Team was immediately formed to make a detailed inquiry into the situation. In addition, an Independent Failure Review Oversight Board, chaired by Dick Adams, former executive vice president for Aerospace at General Dynamics, will be part of the process. Mr. Adams will be supported by a team of senior specialists from industry, government, and Space Systems' customer community.

Dr. Alan Lovelace, chairman of General Dynamics Commercial Launch Services, said in a statement to the press, "The events of the launch have not discouraged us and we remain committed to serving all of our customers by providing them with reliable launch services." He concluded by saying, "We will learn from this mishap and emerge stronger and better able to assure even higher reliability for our upcoming launches."

"We Have a Great Team!"

GD Committed to Launch Services

Michael Wynne, corporate vice president and general manager of Space Systems Division, emphasized the commitment that General Dynamics has to serving our customers by providing reliable launch services. While the failure of AC-70 was a great disappointment, he stated that the space launch business is a risky venture and that those risks sometimes result in failure.

The general manager urged employees not to be discouraged. As part of the long-term perspective of the 62-vehicle program, this failure in itself does not dramatically impact the financial status of the Atlas Program.

"We have a great team," Mr. Wynne said. "We must continue to improve the quality and reliability of our products. It is through our combined skills and efforts that Space Systems can become the best in all of space."

Bill Anders "Rallies the Troops" after AC-70

Bill Anders, chairman and chief executive officer of General Dynamics Corporation, addressed employees from the Atlas Program, Quality Assurance, and Production in the conference room of Building 24 on the afternoon of Friday, April 19.

While Mr. Anders candidly spoke of the failure of Atlas/Centaur 70, he emphasized

that he wanted to remove any doubts

about General Dynamics being committed to the launch business.

"The Atlas worked great," Mr. Anders said. "But right now we don't know why that Centaur engine didn't start."

He spoke of the on-going investigation that was immediately initiated and the Independent Failure Review Oversight Board that will do its own work on researching the failure.

The chief executive officer compared the launch failure to the death of a relative. While it is a time of sadness and disappointment, it is still necessary to continue forward and take pride in past accomplishments.

"We must redouble our efforts to make this the last problem in the program," Mr.

Anders stated. "The next launch will be successful."

He said the corporation is expecting the commercial launch business to pick up any future slack in defense work. He added, "However, we are still in the defense business in spite of misquotes in the newspapers."

The chief executive officer summed up his remarks by saying, "The corporation is behind you and we know the future holds success."

"The corporation is behind you and we know the future holds success."

— William Anders, Chairman and CEO

AC-70 LAUNCH EVENTS

After a normal vehicle checkout and countdown, the Atlas first stage of flight was nominal. The pre-start of events of the Centaur main engine start was nominal at separation of the Centaur stage from Atlas. However, at the planned time of Centaur main engine start, indications are that forward acceleration stopped. At 361 seconds into the flight, the range safety officer sent a destruct command. Preliminary data review indicated that one of the Centaur engines failed to come to thrust at the planned time.

Congressman Lowery Visits Space Systems



Congressman Bill Lowery (on the right) presents an American flag to Corporate Vice President and General Manager Michael Wynne during the congressman's visit to the division Friday, April 12. The flag was special because it had flown over the nation's Capitol in Washington, D.C. In exchange, Space Systems presented a model of an Atlas IIAS to Lowery. After the presentation, Lowery spoke to a group of employees in the lobby of Building 24. Lowery was recently appointed to the House Appropriations Subcommittee, and he emphasized the importance of supporting American space programs' budgets. This ceremony was preceded by a tour of the clean room in Building 5 at Kearny Mesa.

Engineering Personnel Complete Training Program

Ten Industrial Engineering (IE) employees recently completed a 16-session training program titled *Industrial Engineering — How To Do It*.

The course, taught by Don Evanson, covered several subjects including scheduling, developing manufacturing plans, learning curves, method improvements, facilities planning, engineering drawings, organizations, and procedures and proposal development.

The program was offered to all new IE personnel and is part of a continuous updated certified program established in 1972. Ed Squires, division vice president of Production, presented the graduates with certificates of completion.



Standing (left to right): Paul Grecco, Mike Piatt, Don Schramm, Kitt Douglas, Ed Squires, vice president of Production; John Grando, director of Production; and instructor Don Evanson. Seated (left to right): Elie Jerdak, Nash Swan, Sylvia Ball, Mida Sanchez, Thom Pruett, and Chris Laukemann.

Inside Space . . .

Mike Packer has been appointed acting manager of Plant Operations for the Hammond Facility in Hammond, Louisiana. His responsibilities will encompass all production aspects of planning and activation of the facility for the Superconducting Super Collider (SSC) Program. . . . Industrial Security reminds us that personal deliveries such as flowers, balloons, etc. to GD buildings are not permitted. Employees receiving such items will be required to remove them to their vehicles. . . .

Katherine Sun, daughter of Rudi Sun, is Space Systems' 1991 General Dynamics Scholarship Award winner. She will receive her scholarship certificate when she returns from France in July. . . . The Moving Wall, a replica of the Vietnam Memorial in Washington, D.C., will be on display at the Naval Training Center during the week of June 13. GD is one of the event's major sponsors. . . . GDSS

San Diego chapter of the NMA will hold its annual American Enterprise and Scholarship Night on May 23. It will be hosted by Ron Stoneburner, division vice president of Contracts and Estimating. The first prize of the evening's raffle will be a \$5,000 Savings Bond. The guest speaker will be Marty Block, the assistant dean of the College of Education at San Diego State University. . . .

Attention art lovers, CRA is hosting a trip to the Los Angeles County Art Museum on Saturday, July 6. The exhibitions featured are French art from Monet to Matisse, and French couture embroidery. . . .

Earl Christian, Materials and Processes, had an application for a patent filed with the U.S. Patent Office. Kyle Owen, now employed elsewhere, is the co-inventor. Their project was entitled *Thermal Cycling Apparatus*. . . . Space

Systems employment total for the week ending April 19, 1991 was 4,972.

Graphic Services Has Relocated to CP2

Space Systems Graphic Services, Department 718-1, is now located in Century Park Building 2, second floor, northwest corner. You no longer have to travel to Viewpoint Plaza to get graphics, illustration, art design, editing, electronic publishing, forms management, and directives support.

Production support for all proposals, technical publications, presentations, brochures, signage, business cards, memo pads, forms, and division directives is now within easy reach.

Contact Curt Johnson (78902), John Clinger (78903), or Carolyn Wilson (78900) for assistance with graphics support. Contact Bill Schiller (78878) for forms and directives assistance.

For additional specifics please refer to our shared file EM/OS information source. To access it enter: [SS_GRAPHIC_SERVICES].

Add _FM for Forms Management information, _GEP for Graphics/Electronics information, or _MS for Management systems information.

RECYCLING BOX SCORE



Since its inception in December 1990, Space Systems Division's recycling program has racked up the following scores in savings to the environment:

- 628 trees
- 25,218 gallons of oil
- 384,316 kilowatt hours of power
- 122 cubic yards of landfill space

Division 1991 Savings Bond Drive Achieves 94% Participation

Space Systems Division racked up a 94 percent participation rate in this year's Savings Bond Drive. This does not include Harlingen where the drive was delayed by a flash flood.

Bob Di Nal, division vice president of Research and Engineering served as the division chairman of 1991's campaign. Carey Riley, division vice president of Business Development was the co-chairman. Roxanna Khan acted as division coordinator.

The winner of the bond drive's grand prize drawing, a Macintosh computer with software, was **Fred Sanders**.

Winners of the daily prizes were:

Mary Arestad — Makita Power Router

Clayton Clark — Sharp Electronic Organizer

Larry Cook — Samyang Binoculars

Frank Coria — Waring Commercial Blender

Jack Cranston — Krups Coffee Maker

Fred Fengler — Braun Coffee Maker

Lisa Grosse — Makita Electric Drill

Chris Haskell — Olympus Auto Focus Camera

Kim Johnson — Panasonic Speaker Phone

Earl Kates — Cross Pen

Andy Keller — Sony Car Discman CD Player

Mike Kimmy — Donvier Ice Cream Maker

Joe Knapp — Donvier Ice Cream Maker

George La Combe — Answering Machine

Bob Orr — Samyang Binoculars

James Ramsey — Olympus Auto Focus Camera

Ricardo Reyes — Waring Commercial Blender

Martha Rodriguez — Braun Coffee Maker

Randall Sanner — Cuisinart Food Processor

Keith Schick — Krups Espresso Maker

Ferd Spieker — Panasonic Speaker Phone

Bill Strobl — Makita Power Planer

Jon Treat — Donvier Ice Cream Maker

Retirees

Thanks and good luck to these Space Systems employees who recently retired:

Bob Blair, Logistics Supervisor, Logistics Depot, Offsite Support, 38 years

Joe Bradshaw, Engineering Specialist, Senior, Advanced Structures Design, 31 years

Sigmund Buck, Launch Service Technician, Senior, CCAFS Site Support, 33 years

Guy Buono, Precision Welder, Welded Subassembly and Tank Manufacturing, 17 years

Earl Cantrell, Financial Specialist, Senior, Forecasting, 10 years

Lloyd Corey, Launch Service Mechanic, Senior, VAFB Launch Operations, 25 years

Ray Dailey, Engineer-ME, VAFB Fabrication/Maintenance, 34 years

Ken Dower, Human Resources Specialist, Senior, Industrial Security, 5 years

Jack Edwards, Manager-Contracts, Contracts, 34 years

Joe Hoss, Engineer Senior-ME, Space Manufacturing Engineering, 6 years

John Kessler, Group Engineer, Mass Properties, 28 years

E.T. Lipscomb, Jr., Engineering Specialist, Senior, Systems Concepts and Design, 33 years

Gary Price, Engineer Senior-ME, Space Manufacturing Engineering, 35 years

Cruz Varela, Missile Assembler, Space Final Assembly, 34 years

No Orbiteer on May 17



Your editor will be visiting his kith and kin back in Oklahoma and Kansas. The May 31 issue will be published as scheduled.

Promotions

Congratulations to these people who received promotions effective January 19, 1991.

Elena Angeles	Dale Holsopple	Ed Panchak
Thomas Bannasch	Bruce Hosking	Scot Pittman
Thomas Barrett	Harlo Hunter	Barry Priddy
Lisa Baumgarth	Mark Ivanov	Robert Privat
Jack Bono	Jerry Jamison	Brenda Safreed
James Burke, Jr.	Gregg Johnson	Jamie Santa Maria
Sam Burlison	Kim Johnson	Jim Sieleman
Roberto Chavira	John Kendrick	Karen Stiner
David Cooper	Tom Kessler	Frank Stoner
John Dalessandro	Lena Lackey	John Stroud
Terry Davis	Craig Langford	Gerry Szatkowski
Jack Dyer	Jay Larkins	Michael Veno
Kelly Fowler	Sylvia Lopez	Ichi Wakabayashi
Carol Galzerano	Eddie Leung	Bob Watson
Daniel Garcia	Jerry Martinez	Tom Weber
Toni Gonzales	Don Melillo	Pat Whisenant
Bob Hamilton	Wendy Mihalic	Russell White
Roy Harper	Ann Mora	Reid Windle
Jeanie Herring	Robin Morrison	Sidney Wirtz
Tom Hinch	Stacy Murphy	Patricia Wussler
Dorothy Hobson	Melanie Noyes	Bruce Zillgitt

After-Hours Training Offered at Kearny Mesa

Data Systems Division-Western Center Training and Development has scheduled a series of computer and professional development classes to be held outside of normal work hours.

The advantage of these classes is twofold. Employees are able to attend training not otherwise available to them and their departments save valuable labor hours.

All classes are held at the Kearny Mesa plant on the first floor of Building 77. Registration for the classes is available through department training coordinators. For more information, call DSD-WC Training at 33930.

The following classes, all held from 4:45 to 7:45 p.m., are scheduled:

Macintosh MacDraw II — May 6, 7, 13, 14

WordPerfect — May 7, 9, 14, 16

Macintosh Excel Basics — May 8, 9, 16

Macintosh Usage and Applications — May 13, 14, 15, 20, 21

Macintosh Excel Charts, Advanced — May 18, 20, 25, 27

Microcomputer Usage and Applications — June 3, 5, 10

Macintosh PowerPoint — June 4, 6, 11

Macintosh Microsoft Word — June 10, 12, 17, 19

Writing with Confidence — June 11, 13, 18, 20



Space Systems Division
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Beth Littlefield, Reporter
CCAFS, (407) 730-5255

Lela Reddekopp, Reporter
VAFB, (805) 866-9556

CAPS Replace WAPs In New Charging System

The familiar WAP numbers will soon be a thing of the past when the on-line Cost Account Planning System (CAPS) goes into effect on May 11.

Features of CAPS, designed to streamline the direct budget process, include on-line budget planning as well as an electronic signature approval cycle. In addition, a set of new data inquiry screens will replace the screens of the old WAP system.

The major impact of the new system is that the CAPS system will replace all WAP serial charge numbers. Cross-reference reports will be available as of May 10 which tie old WAP numbers to new CAPS numbers.

CAPS user training is currently in progress. If you need training in the new system, contact your training coordinator. A division notice with full information on CAPS will be issued as soon as possible.

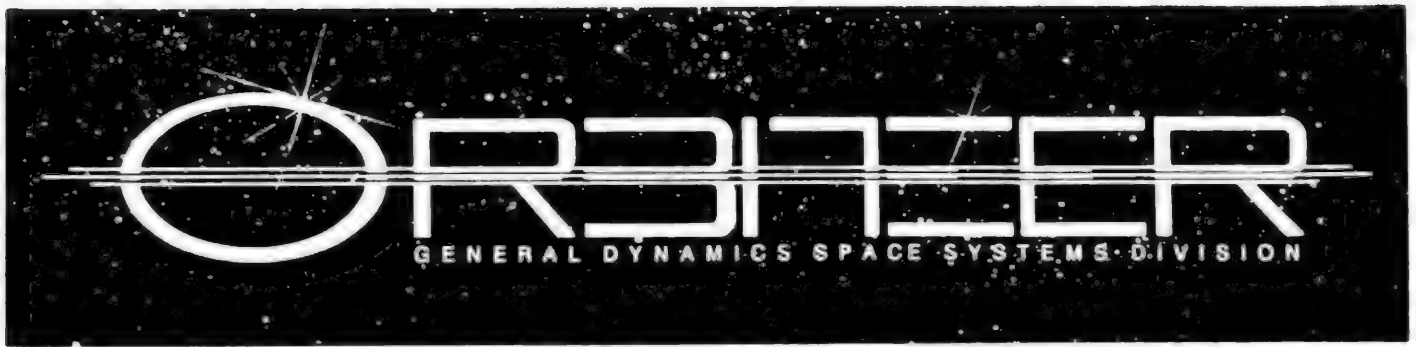
Solo Drivers May Pay to Park at Worksites

The County Board of Supervisors will be voting in June on a regulation that could cost you \$600 a year to park if you drive alone to work. This is a result of pressure from tough state laws on air pollution.

One of the measures being considered to encourage drivers to find a carpool or other shared means of transportation is to force the businesses they work for to charge them for parking in company lots. If the employer fails to meet future commute-reduction targets, the proposed fee is a minimum of \$50 per month. That could climb to \$100.

The provisions of the Clean Air Act require San Diego County to bring its average vehicle ridership up to 1.5 persons during daily commutes. It is 1.2 persons now.

Besides parking fees, employers of 11 or more persons may be required to offer a monthly public transit subsidy and other incentives. Look for follow-up articles on this subject in future *Orbiters*.



May 31, 1991

21 Triumphs in a Row!

Atlas 50E Successfully Launched from Vandenberg!

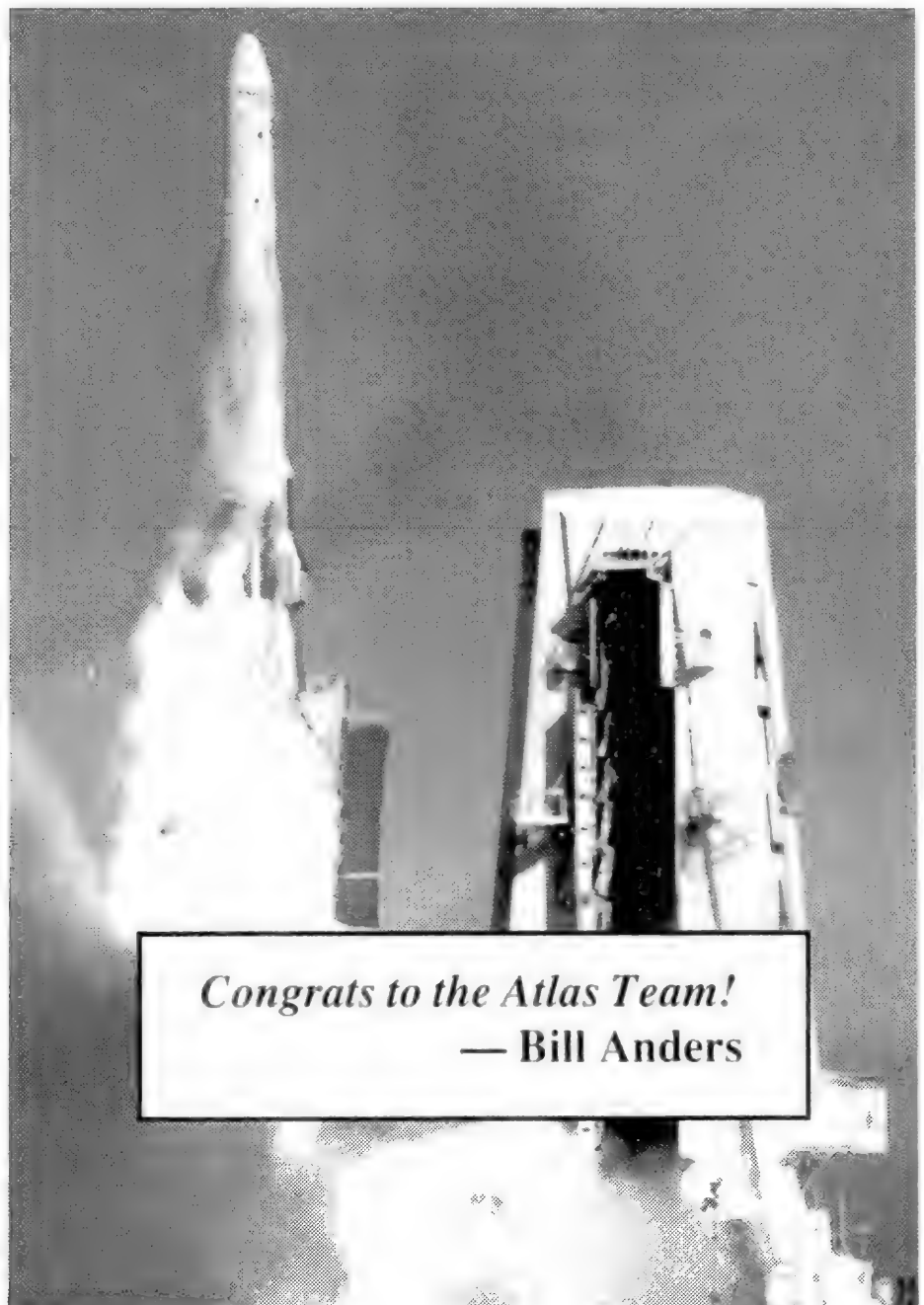
On May 14, 1991 at 8:52 a.m. Pacific Daylight Time, Atlas 50E rose from Vandenberg Air Force Base's Space Launch Complex 3W, carrying the National Oceanographic and Atmospheric Administration's (NOAA) Meteorological Satellite D into a 450-nautical mile, sun-synchronous orbit.

This was the ninth NOAA satellite launched on an Atlas vehicle and the twenty-first consecutive successful Atlas launch from Vandenberg.

Ben Wier, division vice president and Atlas program director, said, "We're proud of Atlas and the role it has played over the years in launching weather satellites for the Air Force and NOAA." He added, "There is a keen public awareness and interest in global environmental change. The weather spacecraft launched on Atlas gives the public a better understanding and early warning of severe weather systems."

The satellite, weighing 3,127 pounds, will observe different portions of the Earth's surface. It has a design life of more than two years and joins three other NOAA weather satellites now on orbit in collecting meteorological and ocean data for transmission directly to users around the world.

The launch vehicle, Atlas 50E, was originally manufactured as an operational weapons system and delivered to the Air Force in May 1961. After serving in operational status and storage through 1984, Atlas 50E was modified, refurbished, and delivered to the Air Force Space Division in June 1986 as the space launch vehicle assigned to launch the Air Force NOAA-D mission.



Congrats to the Atlas Team!
— Bill Anders

Fighting Birth Defects with the March of Dimes!

WalkAmerica 1991 Enjoys a Large, Enthusiastic Turnout!



Get ready! Get set! Go! General Dynamics walkers wait at the starting line for the official signal to begin 1991's WalkAmerica. 725 people from GD's San Diego divisions participated.



A helping hand. Doug Vaughan gives Patty Pierson some physical encouragement as she negotiates the ledge along the boardwalk between Checkpoints 1 and 2.



Space Systems Vandenberg ready for blast-off! Chuck Harter, director of Vandenberg Operations, cuts the ribbon to let the walk begin in the Santa Maria WalkAmerica. The GDSS team of 79 walkers raised \$3,459 to come in first in their area.



100-percent participation by Field Support and Expediting. Shown in this photo taken by Alecia Scott are (left to right, back row) Jeff Robles, Judy Garcia, Mike Paris, Mike Tartar, Connie Manuel, and Jackie Sheinbein. Carol Sargent and Cathie Bakley are in the front. Not shown is Rag Baggay.

Saturday, April 27 was the date and Sea World was the place where 1991's WalkAmerica became another successful annual happening. People from General Dynamics in San Diego donated their time, money, and physical effort in the March of Dimes' largest fund-raising effort for healthier babies.

725 GD people participated in the 25-kilometer (14-mile) walk around beautiful Mission Bay. General parking began at 5:00 a.m. with General Dynamics' registration tables opening an hour later. Once more GD T-shirts stole the show as our walkers sported the garments in the event.

Vons Markets issued a challenge to our walkers in which the grocery chain made a preliminary better showing. While we had \$50,000 in pledges from our walkers, the grocers claimed \$52,000 and 750 participants. But pledges are one thing and actual delivery of funds another. Therefore, General Dynamics still has a chance to come out victorious with a conscientious, vigorous delivery of promised money to the March of Dimes. Everyone is urged to get their money turned in as quickly as possible. If you have any questions, contact your team leader or call Patrick Andrews at 43234.

5/31/91

GDPARC Hosts Air Pollution Workshop

General Dynamics Program Alternatives for Ridesharers and Commuters (GDPARC) hosted an Air Pollution Control District (APCD) Regulation XIV workshop on April 30. More than 115 individuals, representing companies in the Kearny Mesa area, were present to discuss the proposed regulation with Paul Sidhu, deputy director of APCD.

The purpose of this and future workshops is to allow the public and businesses to raise questions and concerns about the proposed Regulation XIV.

At the beginning of July, the County Board of Supervisors is considering the APCD's Regulation XIV and also one from the San Diego Association of Governments (SANDAG).

The APCD's proposal is more stringent. Sidhu emphasized it requires San Diego County to bring its average vehicle ridership up to 1.5 persons during daily commutes. It is 1.2 persons now. "We have to reduce vehicle trips and miles traveled by the year 2000 so that the rate of growth does not exceed that of the population," said Sidhu.

The regulation provides that employers with 11 or more employees pay administrative fees ranging from \$50 to \$800 a year, plus an additional charge of \$40 a year per employee to raise \$100 million annually by the year 2000 to fund

mass transit. The regulation further proposes the following for employer not meeting specified targets:

- Discontinue free parking and charge a minimum parking fee of \$50 for employees who drive to work alone. The fee would climb to \$100 if the employer fails to meet the final target two years into the program.
- Offer a monthly public transit subsidy equal to 50 percent of the transit fare. The subsidy could increase from \$40 to \$60 in 1991-1992, to \$100 in the year 2000.
- Provide a guaranteed ride home program for ridesharers.
- Install bike lockers or racks to encourage the use of bikes.

General Dynamics San Diego divisions are proactive. They currently provide a guaranteed ride home program, preferential parking for carpools, rideshare matching assistance through Commuter Computer and New Employee Orientation, bike racks, and shower facilities.

General Dynamics continues to be involved in the discussion of Regulation XIV every step of the way. The June 7 issue of the *Orbiteer* will provide the names and numbers of the County Board of Supervisors for those employees interested in expressing their opinions on this vital question.

Inside Space ...

The next CRA Players presentation is Neil Simon's *Barefoot in the Park*. This particular production will feature various persons appearing in cameo roles as the delivery person. **Alda Jorgenson** of Space Systems will appear in the June 21 presentation. Call **David Short**, extension 43522, for ticket information. ... The **Moving Wall**, a traveling replica of the **Vietnam Veterans Memorial** will be on display at the **U.S. Naval Training Center, San Diego** June 12-18 daily from 9:00 a.m. to 10 p.m. **General Dynamics** is one of the major sponsors of the display. ... If you're looking for some vacation adventure, check out the **Whitewater Rafting** trip offered by **CRA Travel**. This trip will run August 23, 24, and 25. Call 38248 for more information. ... The finest total **solar eclipse** for North Americans until the 26th century will take place on July 11, 1991. ... The **CRA Amateur Radio Club** will operate a temporary radio station on the weekend of June 22 and 23 at the east end of **Missile Park**. Visitors are invited to see amateur radio in action and learn about the novice licensing class to be offered in September. Call 278-4040 for more information. ... **Mike Phillip** won the **CCAFS Safety Slogan** for the first quarter of 1991. **Mike's** winning slogan was *All in favor of safety glasses say EYE! The eyes have it!*

GDSS at CCAFS "Adopts" Elementary School

Space Systems personnel at Cape Canaveral recently became "parents" of a sort when they adopted Merritt Island Launching Area (MILA) Elementary School for the remainder of this year and the upcoming 1991-1992 school year.

Stacy Fortner Murphy, an electrical engineer for the Atlas/Centaur program, came up with the idea that was quickly put into effect. Applications were sent to 13 elementary schools in the area. After narrowing applicants down to five finalists, MILA was chosen.

A special "adoption ceremony" was held in which GDSS and MILA exchanged plaques and T-shirts. A Declaration of Adoption was also read at the event.

So far, GDSS personnel have participated in MILA's Fourth Annual Family Fun Fest: Garrett Skrobot, an Atlas/Centaur engineer, presented a program on satellites to a 2nd grade science class; the 4th, 5th, and 6th graders enjoyed a presentation of the *Emigrant Trail* slide show and other video material by two other Atlas/Centaur engineers Doug Norkus and Mark Waltrip; and Kim Winters, Mark Welscher, and Garrett Skrobot were judges for MILA's Science Fair.

Space Systems and MILA representatives will continue to reassess the school's educational needs to determine how this partnership will continue for the 1991-1992 school year.

Beth Littlefield of Human Resources said, "Space Systems people are looking forward to creating a strong and effective adopter/adoptee relationship with MILA while establishing a spirit of involvement in and a concern for our public school system."

SPACE SYSTEMS EMPLOYMENT FIGURES (Week ending May 17, 1991)

Cape Canaveral	562
Harlingen	437
San Diego	3666
Vandenberg	271
TOTAL	4936

Promotions

Congratulations to these people who received promotions as of February 1991.

Jaime Almazan	Mark Gorrell	Jackie Newstadt
Bill Amavisca, Jr.	Michael Grace	Tim O'Leary
Sandra Arispe	Rodney Graham	William Patterson, Jr.
Brian Baker	John Grier	Alberto Perez
Ron Bales	Tami Guillory	Amalia Perez
Luis Benavides III	Craig Haddad	Joe Pietrzyk
James Bigelow	Emma Harris	Jose Prado
Todd Booth	Guadalupe Hernandez	Rogelio Rivera
Bill Boyer	Jeanie Herring	Clifford Sherwood IV
John Bryan	Scott Honkonen	Dan Shoemaker
Elaborio Cano	Eduardo Jaramillo	Brady Shoemate
Oscar Chapa	Gary Knight	Dick Smith
Edward Christiansen	Lena Lackey	Randy Smith
Myriene Cook-Molitor	Juan Lares	Mark Spangler
Mickey Cornwall	Ramon Lopez	Douglas Spence
Susi Cowan	Adan Losoya	Rene Trevino
Richard Crain	Alexander Loya	Jesus Villarreal
Thomas Davey	Jesus Marquez	Craig Weikel
Sean Dawson	John Martin	William Wennhold
Frances De Hoyos	Steve Martin	Kathleen Williams
Dave Edwards	Jerry Martinez	Katharyne Wilkie
Arturo Flores	Douglas Mays	Rocky Winter
Gerardo Flores	Jennifer McCoy	Albert Wratten
Thomas Freund	Larry McMurtrey	Alberto Ybarra
David Gomez	Andy Moron, Jr.	Paul Zuelch

Special Season Ticket Offer

Team Up with the Chargers and Run a Blitz on Leukemia



Last year Space Systems Division teamed up with other San Diego General Dynamics divisions to support the Leukemia Society National Televent. This year we are adding to our varsity team by signing on our two credit unions — Point Loma Federal and Kearny Mesa Federal — along with the San Diego Chargers in a coordinated effort to fight leukemia.

Three exciting events will be held in June, July, and August in the campaign against the disease:

- Family Picnic — Saturday, June 15 — Bring your spouse and kids to meet Charger players and cheerleaders at CRA Park. Other events are scheduled to provide entertainment for the whole family.
- Auction — Friday, July 12 — Many items to be auctioned off during an exciting evening at the Hyatt Islandia Hotel. Enjoy refreshments and no-host bar while having the opportunity to bid on items in both silent and live auctions. Door prizes and drawings for other prizes included.
- National Leukemia Televent — Saturday, August 3 — Join other volunteers taking telephone pledges in this televised event.

In addition, you may reserve your 1991 San Diego Chargers season tickets by payroll deduction through the credit unions on approved credit and if certain condition are met. A portion of every season ticket sold in this program will be donated by the Chargers to the Leukemia Society.

Watch for more information in future issues of the *Orbiter*, posters, flyers, and announcements.

DIS Inspection of Space Systems Rescheduled

Space Systems Division has been rescheduled for a Defense Investigative Service (DIS) inspection during the week of June 3.

If you possess a government security clearance, you may be interviewed by a DIS representative. The interview may include some of the following questions:

What are the three levels of classified information?

When did you last attend a security briefing?

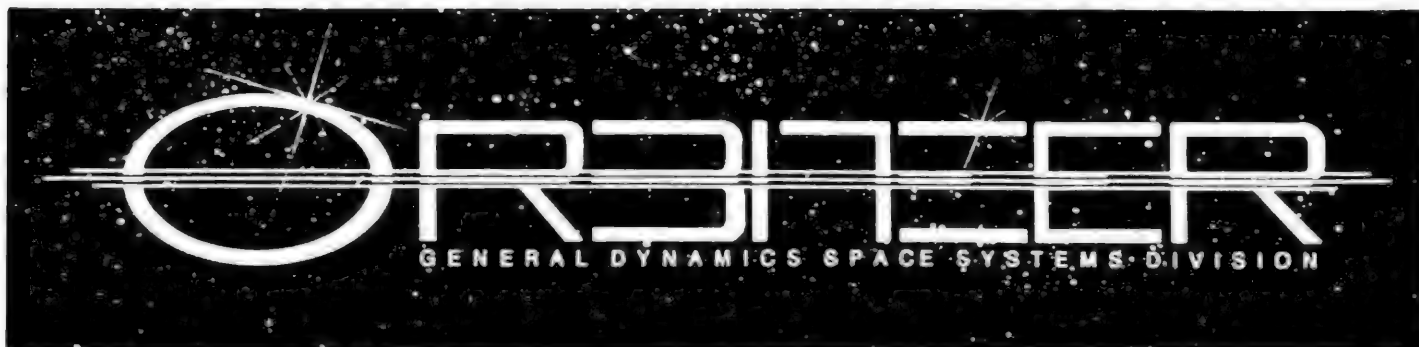
What steps are you required to follow before releasing classified information to another person?

Do you know your reporting requirements?

What is adverse information?

If you discovered an unattended or misplaced classified document, what actions would you take to safeguard it?

If you have any questions or concerns, please feel free to contact Industrial Security at extension 44622. Your support during the DIS inspection is greatly appreciated.



June 28, 1991

Chuck Harter Given Gold Knight Award by NMA

Chuck Harter, director of Vandenberg Operations, was honored by the California Central Coast Area Council of the National Management Association with the Gold Knight of Management Award.

This was in recognition of Chuck's outstanding leadership and management skills which have made significant contributions to the nation's space program.

As base director, Chuck is responsible for all launch operations. Under his leadership and management, General Dynamics currently enjoys a record 21 straight successful launches of the Atlas E missile. In addition, GD Vandenberg operations received the U.S. Air Force's Western Space and Missile Center's Best Large Contractor Safety Award.

Chuck's farsighted management vision has expanded Vandenberg operations to include several new missions: the assembly operation of all Atlas boosters, a new clean room, and an upgraded machine shop that includes vital new capabilities such as the new tube bending machine. The start-up of this major production program at Vandenberg was accomplished because of Chuck's superior management and leadership skills.

He is also active in the community where he lives and works. He was chairman of the Western Spaceport Museum and Science Center's Spaceweek in 1990 and presently serves on the museum's board of trustees. In addition, he is an active supporter of the Santa Maria Museum of Flight. He is a member of the Lompoc Chamber of Commerce and the Santa Maria Valley Industry and Education council.



Brian Lindgren, national director of the National Management Association, presents Chuck Harter, director of Vandenberg operations, with the Gold Knight of Management Award.

Dr. Roberta Baade Named New Human Resources VP

Michael Wynne, corporate vice president and general manager of Space Systems Division, has appointed Dr. Roberta C. Baade as division vice president of Human Resources to replace Bernie Kulchin who is retiring.



Mr. Wynne stated, "It is my pleasure to welcome Roberta back to Space Systems Division. I ask that you all extend to her your support and cooperation in this key assignment."

Dr. Baade, who received her doctorate in communications from the University of Colorado, joined General Dynamics in 1983. She worked at both Convair and Space Systems in positions of increasing responsibility. She has spent two years at the corporate office as

director of Human Resources Development. She and her husband, Dr. George Yee, will be relocating to San Diego.

"I'm very pleased to be returning to Space Systems," Dr. Baade said. "I look forward to once again working with the division's people and products."

Corporate Headquarters to Relocate to Washington, D.C.

William Anders, chairman and chief executive officer of General Dynamics Corporation, announced that corporate headquarters will move from St. Louis to the Washington, D.C. area in the late summer or early fall of this year.

Mr. Anders said, "With the end of the Cold War and increasing pressure on the federal budget, the defense industry of the future will be characterized by reduced government spending and increased competition. Washington, D.C. will be the center of much debate and review of national security policy, military force structure, equipment programs and defense acquisition and export policies." He added, "This move is a business decision based on ensuring the future health and competitiveness of the company. It is difficult to leave St. Louis which offers an excellent quality of life to its residents."

A specific site for the new headquarters has not been selected, but the Virginia and Maryland areas surrounding the nation's capital are under consideration.

Chargers Season Ticket Drive Benefits Leukemia Society

"Tackle Leukemia" Auction on July 12

General Dynamics, the San Diego Chargers, and the Kearny Mesa and Point Loma Federal Credit Unions are continuing their joint efforts in the 1991 Leukemia Society fund-raising campaign.

The next event is an auction — both silent and live — which will be hosted by the San Diego area divisions of General Dynamics. It takes place in the Hyatt Islandia Hotel's Regency Ballroom on Friday, July 12, 1991 from 5:30 p.m. until 9:00 p.m. All items up for bid are brand-new articles and current services donated by local businesses. This is *not* a garage sale! A no-host bar and hors d'oeuvres will be featured. A portion of the drink prices will be donated to the Leukemia Society.

Reserve special Chargers season tickets through a 6-month interest-free payroll deduction loan. The Chargers will donate a portion of each ticket sale to the Leukemia Society. Representatives from both the Chargers and the credit unions will be on hand to assist General Dynamics employees who desire to take advantage of this great offer. Call the Chargers ticket office at 280-2121 for further details prior to the auction.

The admission price of \$10 per person includes a chance at the door prize drawing for a Sony Model KPR-4620, big-screen floor model, color television. This mint-condition TV was donated by the Leukemia Society.

There are no minimum bids on the 200-plus outstanding items and services offered at the auction. You will be able to bid on things such as gift certificates, wine, car alarms systems, jewelry, travel packages, theater tickets, and even a kitchen sink. For those of you looking for services, you'll find haircuts, catering, manicures, housekeeping, and more. There will be chances to learn things too. You can bid on lessons on ice skating, horseback riding, and windsurfing among others. Plus, you'll have the opportunity to bid on a round of golf with a Chargers player. Or, take a chance at being top bidder for a dinner for two with a Chargers player or Chargers cheerleader and their guests.

Bring your family and friends. It promises to be a fun-filled evening. All auction proceeds go to the Leukemia Society. See posters and flyers for details on ticket purchases.

What Is a "Silent" Auction?

This question has been asked a lot since the first publicity flyers on the "Tackle Leukemia" Auction went out through division distribution.

A "silent" auction is one in which the items for sale are displayed. Persons interested in making bids write their names and bids on a list available for each item. At the end of the silent bidding, those with the highest bids win the items.

DPRO Creates Local Recognition Program

Colonel Edward Gassman, commander of the Defense Plant Representative Office (DPRO), has established a local recognition program to issue certificates of Exceptional Achievement Recognition.

The awards recognize either a division, department, team, or a special task accomplishment that demonstrates exceptional and continuous improvement of any Department of Defense acquisition process area.

Space Systems employees are urged to be supportive of any solicitation by DPRO personnel to identify items or activities being considered for the Exceptional Achievement Recognition.

Inside Space . . .

If you are unable to attend the **Tackle Leukemia Auction** but still wish to donate to this fund-raiser, you can make a contribution through the **Matching Gifts Program** with a minimum donation of \$50. Contact **Margaret Beard** at 43244. Or if you wish to make a regular contribution, send a check made out to the **Leukemia Society to Anne Wolff** at MZ 59-7750. A receipt will be provided by return mail. . . . Friends and coworkers of **Shirlee Shaver**, who recently succumbed to leukemia, have collected \$650 to be donated to the **Leukemia Society** in her memory. **General Dynamics** will contribute matching funds. . . . **General Dynamics WalkAmerica** participants have moved ahead in their contest with **Vons Supermarkets**. As of June 11, they have collected \$37,507 against the grocery chain's \$33,414. Let's get any uncollected money turned in pronto to ensure victory. . . . **Ron Stoneburner**, division vice president of Contracts and Estimating, hosted the annual meeting of the **Aerospace Industries Association Procurement and Finance Council** in the Building 24 Conference Center on June 13. . . . **Vandenberg** employees celebrated **500 accident-free days** with pizza and soft drinks. . . . **Public Affairs**, formerly located in CP5, have moved to KM Building 3 on the southwest corner of the second floor. Their new mail zone is 32-1049. Telephone numbers remain the same.

SPACE SYSTEMS EMPLOYMENT FIGURES (Week ending June 14, 1991)

Cape Canaveral	563
Harlingen	434
San Diego	3554
Vandenberg	262
TOTAL	4813

6/28/91

An Open Letter to Customers and Employees on the AC-70 Failure

Dear Customers and Employees:

On April 18, 1991, General Dynamics experienced a launch failure with an Atlas I (AC-70) when one of the second stage Centaur engines failed causing an asymmetrical thrust and resulting in the vehicle tumbling out of control. The second Centaur engine started normally. Range Safety destroyed the vehicle at 361 seconds after launch. No hardware was recovered.

General Dynamics immediately formed a failure analysis team consisting of staff technical specialists and the engine manufacturer, Pratt and Whitney. The team conducted a comprehensive and complete failure analysis which lasted approximately two months. An independent Failure Review Oversight Board was also immediately convened consisting of various industry, NASA, U.S. Air Force, and government experts, whose charter was to review technical completeness and accuracy of our failure investigation on a periodic basis and provide an independent assessment of the failure cause.

On June 11, the General Dynamics failure analysis team, with support from Pratt and Whitney, made its fourth and final day-long presentation to the independent Failure Review Oversight Board. The team also presented its final report to the Board for review and comment.

The failure analysis team concluded that the C-1 Centaur engine turbopump started to rotate and then seized, preventing the C-1 Centaur engine from achieving full thrust. The seizure could have been caused by: 1.) foreign object damage (FOD), 2.) the low torque at the start of turbine rotation combined with a contaminant, 3.) water, ice, or frozen nitrogen in the pump. The team considered scenarios 1.) and 2.) most likely, with item 3.) credible but a lower probability.

On June 18, the Oversight Board met to critique our report and provide an executive debrief. The Oversight Board agreed with our technical analysis but concluded that FOD was the most likely cause of the failure and that the engine starting torque was adequate barring the presence of other abnormal conditions. Although these other scenarios appear credible, the Oversight Board felt that these other failure modes are not as well substantiated by the flight data as the FOD scenario.

General Dynamics increased aggressive risk mitigation and preventive actions throughout the two-month analysis period addressing all three potential failure mode scenarios. We plan to institute the final recommendations of our team and many of the Oversight Board recommendations before our next flight. We also plan to take vigorous action addressing all three potential failure scenarios. These actions will serve to preclude future foreign object damage, enhance safeguards against moisture entering the engine and improve torque margins on the engine turbine during the start-up phase. Although the Oversight Board and the failure investigation team did not find that the engines have inadequate starting torque, it was discovered by both that the robustness of the starting torque conditions was suspect and that some simple sequencing changes would increase robustness substantially.

Special inspections are being implemented at Cape Canaveral to search for any foreign objects that could have escaped the factory inspections. These include added borescope inspections inside the engines, as well as in the valves, ducts and tank sumps of the Centaur stage. X-rays are being taken in duct joints where borescope inspection is not feasible. These borescope inspections will be done before and after the vehicle's critical tanking test (Wet Dress Rehearsal). To enhance our existing comprehensive program, additional inspections are also being implemented at all of our manufacturing sites where FOD could be introduced.

To increase engine torque margin, we will implement a small increase in tank pressure, a warmer engine prechill temperature and a modified ignition sequence. All these improvements can be accomplished by minor changes to the flight and ground launch software. Over fifty engine tests will be performed to establish the margin in these improvements prior to the next flight. Computer simulations will also be accomplished to complement our test program.

Two Atlas II launch vehicles are now on the two launch pads at Cape Canaveral Launch Complex 36 undergoing launch preparations. Upon completion of the planned tests and added inspection, these vehicles will be ready for flight. Atlas II AC-101 will carry a DSCS III for the United States Air Force, while Atlas II AC-102 will carry a EUTELSAT II commercial communication spacecraft.

General Dynamics remains committed to the launch vehicle business and is taking these aggressive measures to ensure our commercial and government customers of the utmost in reliable launch vehicle services.

Sincerely,

Michael W. Wynne

Corporate Vice President & General Manager

DOUBLE BACKHAND AGAINST WASTE!



Since its inception in December 1990, Space Systems Division's recycling program has racked up the following scores in savings to the environment:

- 1,134 trees
- 45,523 gallons of oil
- 693,747 kilowatt hours of power
- 220 cubic yards of landfill space

Hispanic Engineers Support Career Day

A unique Career Day was held at Sherman Elementary School recently. What made this event different from others was that all the guest speakers were Hispanic professionals. The southeast San Diego school is attended by predominately Hispanic children.

Two Space Systems engineers — Javier San Roman from Producibility/Manufacturing Development and Jesus Carreno of Manufacturing Engineering — were among the guest speakers.

The two engineers each gave three presentations in Spanish to fourth and fifth graders. They included a launch video in the talks, and conducted a question and answer period afterward. In addition, Atlas/Centaur models and various posters were on display for viewing by the students.

The presentations were concluded with the presentation of a Space Systems Division poster to each student.

Low-Cost, High Quality Mission for Future Success

Space Systems Hosts Supplier Conference

Roy Bennett, division vice president of Material, organized and hosted the annual Space Systems Division Supplier Conference held on May 16.

Michael Wynne, corporate vice president and general manager of Space Systems, welcomed the attendees and provided an outlook for the future of the division. He concluded his remarks by presenting the annual supplier awards to three companies who demonstrated outstanding efforts in supporting Space Systems in 1990.

The recipients were: Weldmac Manufacturing Company, 1990 Manufacturing Supplier of the Year; Bayless Stationers, 1990 Service Supplier of the Year; and Seidl and Associates, 1990 Small Disadvantaged Business of the Year.

The keynote speaker of the event was Colonel Edward Gassman, commanding officer of the Defense Plant Representative Office. Colonel Gassman provided a motivational account of Total Quality Management's (TQM) success in the Department of Defense and several case studies in

its application in Operation Desert Storm.

Other key speakers were Colonel William Files of USAF Space Systems Division, Larry Sundahl of Martin Marietta, and Donald Morrissey, executive vice president and general manager of Rocket Research Company, who addressed TQM.

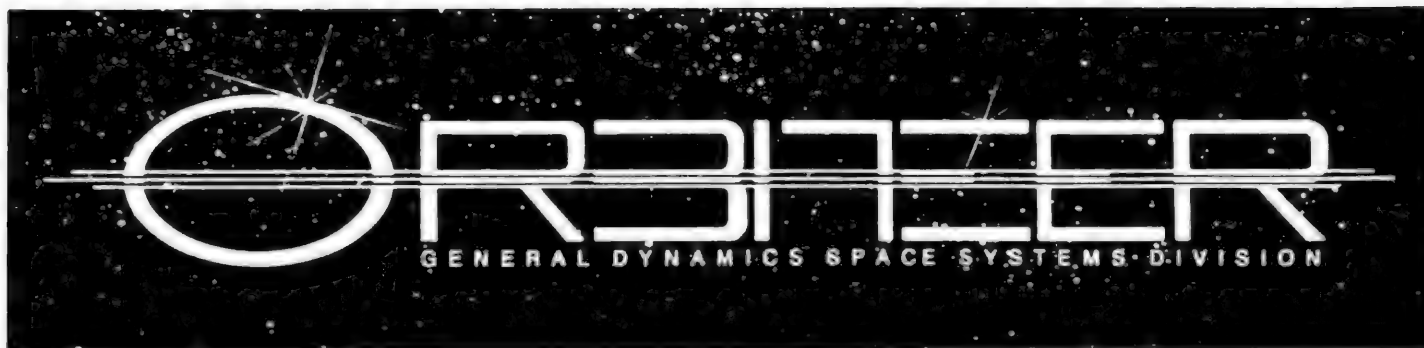
A series of presentations about Space Systems programs and requirements were presented by Dave Hackley, Titan/Centaur program manager, and Ben Wier, division vice president and program director of Atlas Programs. Charlie Lloyd, managing director of Commercial Launch Systems spoke on the competition in the launch industry.

Roy Bennett and Jim Muir, director of Procurement, gave the suppliers their mission of low cost and high quality for future success in dealing Space Systems.

The final and highlight feature of the conference was a question and answer panel hosted by the Space Systems executive staff. This panel fielded questions from the floor on a number of topics.



The Space Systems executive panel responds to suppliers' questions during the annual Space Systems Division Supplier Conference. From left to right are: Dave Hackley, program control manager, Titan-Centaur; Ben Wier, division vice president and program director of Atlas programs; Ed Squires, division vice president of Production; Don Moore, division vice president of Quality Assurance; Roy Bennett, division vice president of Material; and Bob DiNal, division vice president of Research and Engineering.



August 9, 1991

Space Systems Signs \$166 Million SSC Pact

Space Systems has received a contract from the Universities Research Association Super Collider Laboratory, valued at \$166 million. The agreement authorizes the division to begin full implementation of design, development, and preproduction of the dipole magnets for the Superconducting Super Collider (SSC). This is the finalization of the \$3 million letter subcontract already signed (See the June 14, 1991 *Orbiter*).

The full contract, which was approved by the U.S. Department of Energy (DoE), provides for Space Systems to be the leader responsible for design of the SSC dipole magnets. We will build 15 prototype and 35 preproduction magnets. These will be used to assess performance of the production design and to test the automated tooling that will be used in the production phase of the program. The division will also provide 251 production magnets. In 1994, Space Systems will compete with Westinghouse Electric

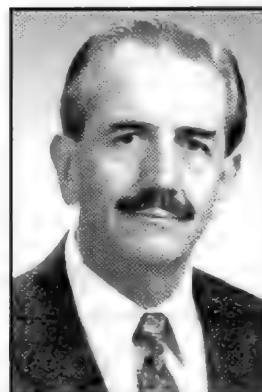
Corporation for production of the remaining 8,150 magnets.

Presently, the division has over 30 people at the Fermi National Accelerator Laboratory in Batavia, Illinois where they are working with lab personnel in assembling seven demonstration magnets. These will be used by the SSC laboratory in collider tests. Meanwhile, in San Diego, a team of our people is responsible for design activities and program procurement. Space Systems is modifying its leased facility in Hammond, Louisiana where dipole magnet development, production, and testing will take place.

The SSC, the largest instrument ever designed for scientific research, is to be built in Ellis County, Texas, 30 miles south of Dallas. It is being designed and built for the DoE by Universities Research Association, a nonprofit consortium of 78 leading research universities in the U.S. and Canada.

Salvador Will Head Up Hammond Facility

Galdino Salvador has been appointed division vice president and plant manager of the Space Systems facility at Hammond, Louisiana. This is where the division will build the dipole magnets for the Superconducting Super Collider.



Mr. Salvador was affiliated with the Chrysler Corporation from 1952 to 1983. He held several positions of increasing responsibility

in manufacturing and production, including launch operations manager for Chrysler at the Kennedy Space Center.

He joined General Dynamics in 1983 when the corporation acquired Chrysler's main battle tank operation in Sterling Heights, Michigan. That organization became Land Systems Division. Starting as the M1A1 program manager, he progressed to manager of the tank plants in both Detroit, Michigan and Lima, Ohio. In 1989, Mr. Salvador became vice president - United Kingdom programs for Land Systems Division in London, England.

He received a bachelor's degree in mechanical engineering from Washington State University. He and his wife Eva are relocating to San Diego, and will later move to Hammond for the opening of the facility in 1992.



Pictured above is Space Systems' new Hammond, Louisiana facility where magnet development, production, and testing will take place in the Superconducting Super Collider program.

Vice President Quayle Visits GDSS at Vandenberg



Dan Quayle, vice president of the United States, paid a visit to Vandenberg AFB last month. During his time there, he visited Space Systems for a briefing on the division's activities. Michael Wynne, corporate vice president and general manager of Space Systems (on the right) acted as the vice president's host. Also shown are (left to right): Congressman Robert J. Lagomarsino, 19th Congressional District; Chuck Harter, director of Vandenberg Operations; and Vice President Quayle.

Vice President Quayle Announces National Space Strategy and Long Range Planning

The following is an official news release issued on July 24, 1991 by Vice President Dan Quayle's Press Secretary.

Today the Vice President announced a new National Space Launch Strategy which provides a long-range plan to meet America's space launch needs. The strategy, which has been approved by the President, calls for maintaining current launch systems and facilities and extending their useful lifetimes well into the first decade of the new century. The new policy states that while the current fleet of Space Shuttles will continue to meet manned spaceflight needs, the purchase of additional Shuttle orbiters is not planned.

In the future, the nation's core launch needs will be met by a new family of vehicles — a new national launch system — to be developed jointly by the Department of Defense and the National Aeronautics and Space Administration. These new launchers will make space more accessible by reducing operating costs and improving reliability, responsiveness, and mission performance.

The strategy calls for a vigorous space launch technology program which can provide the basis for revolutionary improvements in launch capability in the future. The strategy also provides guidance which will ensure that actions taken to meet U.S. government launch needs also serve to strengthen the U.S. commercial space industry and enhance America's international competitiveness.

The National Space Launch Strategy was developed by the National Space Council, chaired by the Vice President.

John Thacker Appointed VP of Quality Assurance

Michael W. Wynne, corporate vice president and general manager of Space Systems Division, announced the appointment of J.A. (John) Thacker to the position of division vice president of Quality Assurance.



Mr. Thacker will replace Don Moore who is retiring in September. The vice president appointee visited San Diego on July 24 for an orientation. He will report to

his new position later this month.

Mr. Thacker is a long-time GD employee. His most recent assignment was director of Test Equipment Engineering at Air Defense Systems. He holds a bachelor of science in electrical engineering from Howard University and an MBA from California State at Fullerton.

Michael Wynne said, "Mr. Thacker has been involved in all aspects of product quality in his career and brings a new quality vision to Space Systems. We welcome John Thacker and his family."

Suggestion Program Entries Are in Work

Although the division's Employee Suggestion (ES) Program came to a close on April 15, a lot of time and hard work is going into evaluating, implementing, or explaining why all suggestions received should or should not be implemented and accepted.

During the first half of 1991, 277 ES awards were presented as compared to 237 suggestions awarded for all of 1990. Five of the suggesters received awards over \$5,000.

A total of 1,133 suggestions were open and pending at the close of the ES Program. Suggestions still to be processed as of July 26, 1991 totaled 543.

The department evaluators, teamed with the Human Resources ES Department, are committed to responding to all open or pending suggestions.

A healthier future for employees' babies

The Maternity Fraternity Offers Prenatal Care and Counseling

The hope of every expectant mother is the birth of a healthy baby. Unfortunately for many pregnant women, this dream does not come true because they didn't receive the necessary information to increase the likelihood of a strong, healthy child.

Space Systems Human Resources Department is seeking to avert that tragic situation within the division's population through a club they have recently organized — the Maternity Fraternity.

Expectant parents are urged to join the Maternity Fraternity and learn how they can create a healthier future for their babies. The club will arrange for them to view a *Journey to Birth Video*, receive a resource packet with useful information on pregnancy, and attend seminars covering such topics as "Danger: Tobacco, Drugs & Alcohol during Pregnancy — a Risky Combination," "Coping with Stress during Pregnancy," "The Role of Genetics," "Eating for Two," and more.

All interested Space Systems employees and their spouses, who are looking forward to parenthood, are eligible to join. As an added incentive for division female employees, they will be eligible for a gift if they meet the following criteria:

- See their private physician and report to General Dynamics Medical Department during the first three months of pregnancy.
 - Interview with an industrial hygienist during the first three months of pregnancy.
 - View a 25-minute March of Dimes videotape entitled *Journey Into Birth*.
 - Attend one free workshop sponsored by the March of Dimes during their pregnancy. These workshops will be offered on-site and cover a wide range of interesting topics. Members of the Maternity Fraternity may attend as many sessions as they wish.
- After completing the above, pregnant employees may choose one of six gifts offered: a swing, car seat, porta-crib, stroller, playpen, or a \$50 gift certificate.

To receive more information on the Maternity Fraternity, contact Nancy Kimerly, extension 77670 or Sharon Orlando, extension 43594.

Happy parenthood!



Discussing Space System Division's Maternity Fraternity are (left to right): Nancy Kimerly, Human Resources; Jennifer Roney, expectant mother; and Elaine Briggs, industrial hygienist.

Space Systems Division Passes Semi-Annual Industrial Security Inspection

During June 3 through 7, Space Systems underwent a thorough inspection of the division's compliance with Industrial Security Regulations.

The results were excellent. The Defense Investigative Service (DIS), upon completion of the inspection, sent a letter to Michael Wynne, corporate vice president and general manager of Space Systems, stating, "The security posture at your facility remains strong." Also noted by DIS was the division's effective security education program.

Ten employees have been recognized by the Industrial Security Department by presentations of Certificates of Outstanding Performance for their contributions to maintain the excellence of the Security Program at Space Systems Division. They are:

Ron Brauer, Guidance & Control; **Warren Gee**, Thermal Control; **Tim Howard**, Trajectory & Performance; **Steve Perry**, Systems Software; **LaVerne Rhoades**, Launch Vehicle Engineering; **Julie Richardson**, Mass Properties; **Jason Robinson**, Avionics Systems; **Alice Roche**, DSD, Space Computer Facilities; **Ron Schroeder**, DSD, Space Computer Facilities; and **Suzanne Schulte**, Systems Software.

Ron Davis, director of Security, and his staff wish to thank the persons recognized above, and all employees who participated in making this inspection one of the best the division has ever had.

Refresher Shorthand Course To Be Offered

Any employee interested in taking a refresher course in shorthand will have the opportunity to attend classes beginning September 4, 1991.

The schedule of instruction, to be given on Mondays and Wednesdays from 4:45 p.m. to 6:15 p.m., will end on January 15, 1992. A speed certificate will be made available.

The classes will be held in CP2 in the Titan/Centaur Program Office conference room. The cost of the course is \$5.00 per each of 2 units and a \$2.50 Health Service Fee. The cost of text books will be announced at a later date.

To sign up for the classes, EM/OS Susan Corrao (CORRAO,SF) no later than August 21 with the following information: Name, division, mail zone, extension EM/OS account.

GM Holds Informal Luncheons for Employees

Michael Wynne, general manager of Space Systems, is a strong believer — and practitioner — of employee communication. To further advance this rapport, the general manager has instituted bi-monthly lunches in which employees, selected at random, are invited to join him for a mid-day repast and a frank discussion, followed by a question-and-answer session.

There are four objectives of the luncheons: To open lines of communication between the general manager and employees; to improve employer-employee relationships; to communicate directly to employees so that inconsistency and rumors floating about the division can be alleviated; and to serve as a source of information for both the general manager and the employees.

Mr. Wynne said, "I am hosting these lunches to provide a forum for open communication within our division. It also gives me an opportunity to speak frankly about the division's challenges and receive input from our employees on matters that concern all of us."

The reactions of employees attending the lunches have been enthusiastic and positive. Some of their comments are:

"The lunch was well-organized and an important element to positive communication."

"I liked the discussion on business development along with Mr. Wynne's outlook on the future of the division."

"I enjoyed the open question-and-answer session."

"Mr. Wynne's straight forward answers helped eliminate a lot of rumors."

"I came in not trusting the whole 'thing,' but left much more at ease and with a lot more information."

Activities such as the general manager's luncheons in which employees' input is encouraged, are proving to be a big help in identifying challenges and working toward our division goals.



Corporate Vice President and General Manager Michael Wynne, at the head of the table, is shown hosting one of his bi-monthly lunches with randomly-selected employees as his guests.

Kearny Mesa Building 24 Lobby Hours Changed

Effective immediately, access through the lobby of Kearny Mesa Building 24 will be as follows:

Monday - Friday: Open, 5:50 a.m. and closed 9:45 p.m.

Saturday: Open 6:00 a.m. and closed 4:00 p.m.

Sunday: Closed.

During the hours the lobby is closed, an alternate point of entry is available through the booth located at the northeast corner of Building 24. This gate, equipped with a monitored camera system, utilizes employee badges.

Employees using the booth will be allowed entry after identification and inspection of purses, hand-carried lunches, or briefcases they may have with them. Due to the nature of the camera system, the plant protection officers may not always be able to fully inspect the above described containers. If this occurs, the employee will be asked to exit the booth and proceed to the nearest open gate for entry and complete inspection of any hand-carried items.

Employees attempting to enter with items other than described, will not be allowed entry through the booth. As always, sealed packages, radios, weapons, explosives, alcohol and the like are not permitted.

Boom Suggestion Nets \$109K-Plus Savings

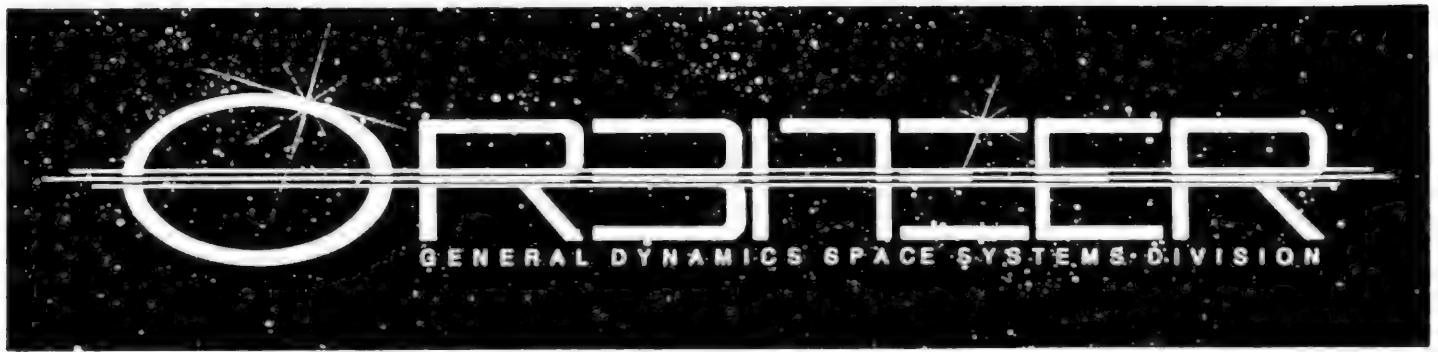
John Boerlin, an engineering specialist for the Atlas/Centaur Program at Cape Canaveral, submitted a suggestion entitled "36A Booms." A boom is a retractable cross over from the mobile service tower to the umbilical tower that supplies propellants, electrical cables, and purges to the Centaur.

John learned there were plans to fabricate two new boom structures like the ones at SLC- 36B. "I had previously seen three boom structures in front of a hangar at the Merritt Island airport that looked like the booms used on the umbilical tower at SLC-36B," John said. He went back to the airport to talk to the owner of the booms about procuring two of them. He found these structures had been used on the SLC-37 umbilical tower during the Saturn I Program and had later been sold as scrap. They were identical to the ones needed for SLC-36A.

As a result of John's suggestion, GD saved over 4,450 labor hours and \$2,400 in equipment, a savings of \$109,044.60.

SPACE SYSTEMS EMPLOYMENT FIGURES (Week ending July 26, 1991)

Cape Canaveral	562
Harlingen	425
San Diego	3424
Vandenberg	260
TOTAL	4671



August 23, 1991

CRAG Audit Brings Government Praise and Approval

DoD Commends Division Procurement

The Department of Defense (DoD) has once again recognized the Material team of Space Systems Division for its ongoing efforts in establishing and maintaining an approved purchasing system.

This renewed approval constituted the achievement of a significant milestone. This is because Procurement received approval without the annual government review that is normally required to validate such a system. Through the application of the Contractor Risk Assessment Guide (CRAG), the Procurement team was able to demonstrate that it has a self-governing program that reviews and complies with all customer requirements on a daily basis. For this reason, the need for government oversight was greatly reduced.

In a letter to Roy Bennett, division vice president of Material, DoD's Divisional Administrative Contracting Officer Susan Maxwell commended the Space Systems Procurement team for its conscientious efforts. She also extended the approval of the division's purchasing system through August 1992 based on her review of our CRAG Self-Surveillance Report.

The CRAG Program was designed by DoD to encourage contractor self-governance, develop internal control systems, and improve the efficiency of DoD oversight. Contractors, such as Space Systems, who demonstrate internal control systems meeting CRAG objectives receive less direct audit requests. This relieves both the government and the division of the need for lengthy system audits.

The Space Systems Procurement Team demonstrated that it has excellent control in the areas of:

- Policies and Procedures
- Organization and Administration of the Purchasing Function
- Cost-Effective and Efficient Purchasing Requirements
- Source Selection
- Pricing
- Subcontract Award and Administration
- Internal Audit Capability

Space Systems became the first company in the Western Region to receive approval based on demonstration of its internal control system. The Procurement Department obtained the original CRAG validation in 1990 which eliminated the requirement for a Contractor procurement System Review in 1991.



Susan Maxwell, on the right, DoD Divisional Administrative Contracting officer, presents the Procurement System Approval to Roy Bennett, division vice president of Material.

Former School Teachers Sought for Grants Program

Space Systems will once again conduct a Teaching Excellence Grants Program for the 1991-92 school year. This community relations activity provides opportunities for San Diego area school teachers to apply for grants to conduct classroom work above and beyond their normal budgets. This includes equipment, field trips, material, and other necessary services or administration.

The division coordinator is Patrick Andrews of the Human Resources Department. He is seeking ex-school teachers among Space Systems employees to serve on the selection committee. It will be their job to judge the applications for grants and select three winners. Selectees will each receive a certificate and check for \$1,000 to apply to their programs.

Alda Jorgenson, division director of Community Relations, said, "Pat is going to act as the coordinator of the grants program. We want the actual judging and choice of winners to be done by people with experience as teachers in school classrooms."

Last year's program provided for one winner. This outstanding educator was Mrs. Carin Moore, a second-grade teacher at Rio Seco Elementary School in Santee. Her project was to have her class of second graders publish a regularly scheduled newsletter.

If you are a former school teacher and wish to serve on the Teaching Excellence Grants Committee, please contact Patrick Andrews at 43234, MZ K1-7000, or EM/OS ANDREWS.PE.

"A great Day for General Dynamics and a great day for Hammond..."

Hammond, Louisiana Extends South

Hammond, Louisiana made August 8, 1991 **General Dynamics Day** as the whole town, complete with dignitaries, turned out to celebrate the ribbon-cutting and open house of Space Systems' production facility in the community. This is where the dipole magnets for the Superconducting Super Collider (SSC) will be built.

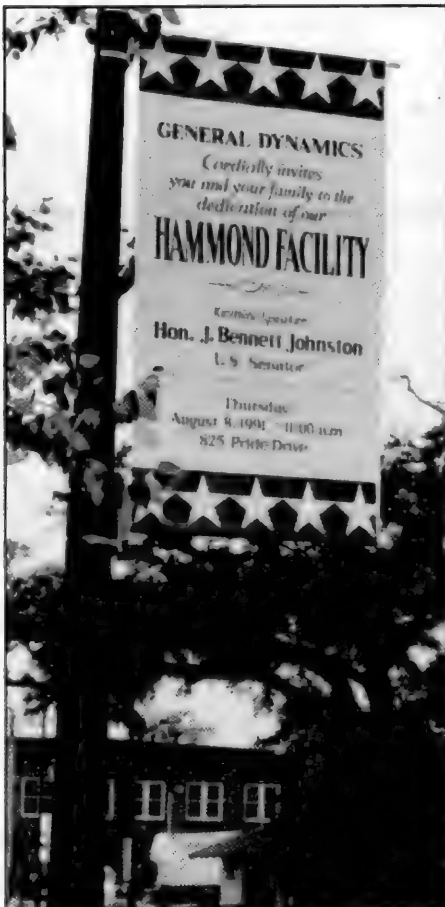
General Manager Michael Wynne of Space Systems addressed the attendees, saying, "This is the place to build a future. It's a great day for General Dynamics and a great day for Hammond." He also stated that General Dynamics has made a significant, long-term commitment to Hammond and looks forward to a lasting relationship that will benefit both the company and the city.

Senator J. Bennett Johnston, Democrat-Louisiana, who serves as chairman of the Appropriations Subcommittee on Energy and Water Development, delivered the keynote remarks at the ceremony. His committee has jurisdiction over funding for the SSC program, and won a substantial increase in funding to keep the project on schedule.

"This is the single most important research effort under way in the world," the senator said. "It will mean important advances in virtually every field of science and technology." He added, "Louisiana, and particularly the people of Hammond, can be very proud of the part we will play with General Dynamics in this bold and exciting program."

Other officials who participated in the program were Congressman Richard H. Baker, Republican-Baton Rouge and Charles McKaskle, mayor of Hammond. Various staff members of General Dynamics were also present. They were: Al Chase, senior vice president, Government Relations; Dick Hora, division vice president of Energy Systems; James Mellor, president and chief operating officer; Carey Riley, division vice president of Business Development; Galdino Salvador, division vice president and plant manager of the Hammond facility; and Ed Squires, division vice president of Production.

Everyone from General Dynamics who visited the beautiful southern city were pleased with the friendly reception and atmosphere provided by the local people.



Signs like this one were put up all over Hammond, Louisiana inviting the populace to the dedication ceremony of the General Dynamics Facility.

The facility is beautiful, but everyone agrees that the real gem is all the wonderful people of General Dynamics.

— Nanette Guen
Vice President, WFPR-WHMD Radio
Hammond, Louisiana



Space Systems General Manager Michael Wynne goes over the agenda for the ribbon-cutting ceremony. From left to right are Dick Hora, division vice president of Energy Systems, James Mellor, president and chief operating officer, Alan Chase, senior vice president of Government Relations, and Michael Wynne.

8/23/91

ern Hospitality to General Dynamics

... the people of Hammond, can be very proud of the part we will play with General Dynamics in this bold and exciting program.

— J. Bennett Johnston
U.S. Senator, Democrat-Louisiana



Hammond Mayor Charles McKaskle (left) and Ed Squires, division vice president of Production, discuss the new facility.

My! Ain't physics grand?

—Anonymous quote
Hammond Daily Star

Flanked by James Mellor, president and chief operating officer of General Dynamics on the left, and Space Systems General Manager Michael Wynne on his right, U.S. Senator J. Bennett Johnson cuts the ribbon opening up the division's Hammond facility.



The crowd was large and attentive as shown by this photograph.

A Continuing effort to provide an ergonomically correct workplace

GDSS Aids in Purchase of Unique Wheelchair for SSC Team Member

Marlon Jackson, a Space Systems employee working on the Superconducting Super Collider (SSC) dipole magnet program at our Hammond facility, is disabled as a result of an automobile accident in 1988 which left him confined to a wheelchair.

Marlon decided he would enhance his versatility as an SSC team member if he were able to work in a standing position. For this reason, he purchased a special wheelchair that allows him to perform his job in a vertical position. Because the chair is not a specified requirement to perform his job and it is his secondary wheelchair, the state of Louisiana was required to pay only half the cost of the new equipment. Marlon personally picked up the rest of the tab.

In the spirit of the Americans with Disabilities Act (ADA), Space Systems Division decided the unique wheelchair should not be a personal financial burden to Marlon. The ADA, which becomes law in June 1992, states that employers make reasonable accommodations to meet the needs of disabled individuals. Space Systems was pleased to meet the standards of ADA while continuing division efforts to provide an ergonomically correct workplace by taking the opportunity to meet the reasonable needs of Marlon Jackson. On August 7, 1991, Michael Wynne, general manager of Space Systems, presented a check to Marlon Jackson to cover the amount of money he had put out from his own pocket for the Lifestand wheelchair.

Marlon has been employed as a magnet technician since July. He is a member of a small team assembled for a 9- to 12-month industry demonstration program at the Fermi Lab outside of Chicago. This group's mission is to develop superconducting magnet production expertise. Following this technology transfer program, Marlon will return to Hammond as a vital member of the team charged with establishing the capabilities for superconducting magnet production at Hammond.

Marlon earned a Bachelor of Science degree in Electronic Engineering Technology from Southern University, Baton Rouge, Louisiana. He is active in Advocate for Independent Living, participates in the National Society for Black Engineers, and enjoys wheelchair basketball, swimming, and fishing.

Inside Space . . .

Tom Edwards, Facilities, wants to remind us all that Space Systems is not recycling newspapers, magazines or cardboard in the bins put out for recyclable paper. If you have any questions, call Tom at 32905. . . . **Ann Stonecipher** of the MRP II Team wants to thank all the people who responded to the MRP II Newsletter Questionnaire. She reminds everyone to look for the first issue in October. . . . **Ted Stern** and **Mickey Cornwall** of the Space Power Group received a patent for their invention titled *Fiber Optic Light Guide with Improved End-to-End Efficiency*. . . . Over 300 **Vandenberg Space Systems** employees, families, and friends gathered at Los Alamos County Park recently for the annual company picnic with a Santa Maria style barbecue headlining the menu. . . . **CRA Travel** has come up with some more good trips. There is a Thanksgiving Holiday in Cabo San Lucas that leaves November 28. The return is on December 1. There has been a change to the popularly received Whitewater Rafting Trip. Now participants will fly to Sacramento. There is also a new price of \$310. If anyone is interested in a short-cruise, there are 3-day excursions from L.A. to Catalina and Ensenada via the good ship *Viking Serenade*. These on-going activities are continuous through December 20. Call 38248 for details on all these trips.

Lost and Found Service Is Available at Kearny Mesa

Anyone who has gone through the unpleasant experience of losing something knows the frustration it can cause. What many employees *don't* know is that there is a Lost and Found Service available at Kearny Mesa.

When someone discovers a lost object and turns it into either a plant protection guard or lobby receptionist, a certain procedure is followed. At the end of the shift, the found item is turned into Lost and Found at Convair Employee Benefits by the guard.

A form is filled out listing the article, date found, description, and the finder. The lost article is kept for 60 days. At the end of that time, if it is not claimed, it is either disposed through a charitable organization or given to the finder. Prescription glasses, however, are kept until the end of the year. At that time they are given to the Lion's Club. This organization has a charity involved in used glasses.

If the object is valuable, such as jewelry or a wallet with money, two persons (usually a receptionist and guard) verify the amount and/or condition of the item.

Charlotte Whorton, receptionist in the lobby of KM Building 24, said, "Ninety-nine percent of Space Systems employees are honest. When they find something, they'll turn in to me or the guard on duty." Most of the objects found are sunglasses, Charlotte said, followed by jewelry, keys, and money. She added, "People using the phones in the lobby have a tendency to leave things there."

If you've lost something at Kearny Mesa and wish to see if it has been turned in, call Gail Hatfield at 39916.

Santa Maria Barbecue Is Scheduled Next Month at CRA Missile Park

All you cowboys and cowgirls out there can get ready to put on the ol' feedbag. The annual Santa Maria Barbecue is set for Saturday, September 21.

Come on out and enjoy the very best Santa Maria prime beef roasted over an open oakwood fire, then served up with potato salad, baked beans, sourdough bread, ice cream, and a beverage of your choice.

Besides the vittles, there'll be a live country-western band for dancing, games, train rides, and the carousel will be running for the little trailhands. There will also be an NMA Scholarship Drawing with great prizes!

The chuck wagon is going to be serving up the grub between 3:00 p.m. to 5:00 p.m. Ticket prices are the same as last year — \$8.00 for adults and \$2.00 for kids under 10. Tickets for beer, soft drinks, and rides will be sold at booths. Look for posters and flyers announcing ticket sales information.

Ben Wier, division vice president and program director of the Atlas program, is the host. He says, "Y'all come on out now and enjoy yourselves! If you missed last year's barbecue, you missed a great time. If you were there, I know we'll see you again!"

General Dynamics Employees "Star" in Leukemia Televent

The 1991 Leukemia drive was wrapped up on Saturday, August 3 with a "Televent" in which San Diego area volunteers manned telephone banks, taking pledge calls from the public. This nationally televised event was the grand finale to our four San Diego General Dynamics divisions' fundraising efforts, marked by the "Tackle Leukemia" Picnic (June 15) and the Live and Silent Auction (July 12).

The Televent, aired from Sea World, was hosted by Channel 10's anchorpersons Jack White and Carol LeBeau. Space Systems was well represented at the charitable happening by the following volunteers: Carol Aguilar, Patrick Andrews, Ron Bennett, Linda Campbell, Betty Davis, Pam Dougherty, Barbara Freeman, Bret Kudlicki, Stacy Leppert, Carol McSweeney, James O'Brien, Carol Palmer, Fred Powell, Lori Rose, Sheryl Squire, Monica VanDerWerf, Deanna Wheaton, Anne Wolff, David Wolff, and Sandy Ziegler.

There was also a "VIP" telephone panel. Jerry Stenovec, director, Advanced Programs and Technology, Business Development; Roy Bennett, division vice president of Material; and Donna Sandsmark, manager of Material Operations, all answered telephones. Ed Squires, division vice president of Production, was present in his role as the leukemia fundraising chairperson of the four San Diego Divisions. Ed went on the air locally to make a check presentation on behalf of General Dynamics.

The Leukemia fundraising campaign was a great success, raising \$127,000 locally. The four General Dynamics San Diego divisions contributed \$50,000 to the Leukemia society's 1991 research efforts. Everyone who participated in the Televent enjoyed themselves and felt a great deal of satisfaction in participating in this fight against a fatal disease.

Thank you, General Dynamics employees!



September 6, 1991

GDSS Successfully Completes Superconducting Super Collider Laboratory System Design Review

The Superconducting Super Collider Laboratory (SSCL) conducted a System Design Review (SDR) of Space Systems at the Daley Center facility August 27 and 28.

This was the first formal major review by SSCL, the program's sponsor, and was conducted to ensure the division's understanding and adequate definition of Collider Dipole Magnet (CDM) requirements. The SDR focused on all program elements, the most important being system requirements, system design, and an industry demonstration at the Fermi National Accelerator Laboratory to show that Space Systems can successfully assemble the magnets.

The SDR was well attended and included representatives from Space Systems, Westinghouse, SSCL,

Brookhaven National Laboratory, Fermi National Accelerator Laboratory, the Department of Energy, and Babcock and Wilcox the quadrupole magnet contractor.

The SSCL group was headed up by Herb Trenham, CDM product manager, and Bill Askew, lead systems engineer, SSCL. It was comprised of separate teams led by SSCL managers, that focused on seven key program elements:

- Design
- Systems Engineering
- Test
- Manufacturing
- Program Management
- Quality
- Procurement and Contracts

On August 29, Space Systems was debriefed by the SSCL team captain on action items resulting from the

SDR. The division will address these action items to complete the successful review. This also authorized Space Systems to proceed with all actions toward prototypes, including design of tooling, equipment, magnets, and procurement of material.

The Superconducting Super Collider Dipole Magnet program is focused on the design and demonstration of reliable, producible, and cost-effective magnets. The current program is worth \$166 million over four years, exclusive of planned add-ons for tooling, speciality magnets, and other miscellaneous items. During the third year of the program, Space Systems will compete with Westinghouse on a fixed price full-rate production program of 10 magnets a day. This has the possibility of being worth over \$1 billion in sales to the division.



Shown during the SDR are (from left to right): Galdino Salvador, division vice president and plant manager of the Space Systems Hammond facility; Herb Trenham, CDM product manager; Roger Coombes, deputy head of Magnet Systems Division, SSCL; and Bob Baldi, SSC program manager, Space Systems Division.



The group attending the SSCL's System Design Review return to work after taking a short break in the proceedings. They represent Space Systems, Westinghouse, SSCL, Brookhaven National Laboratory, Fermi National Accelerator Laboratory, the Department of Energy, and Babcock and Wilcox the quadrupole magnet contractor.

"... good will, encouragement and prayers ..."

"Baby Nicole" Kronberger Is Doing Fine Through Employee Blood Donations

Nicole Kronberger, infant daughter of Space Systems employee John Kronberger and his wife Anne, began life precariously as a premature baby. Her weight at birth was only one pound, six ounces. That's about the weight of two cans of soda.

Her immediate health problem was respiratory distress syndrome. John consented to an experimental drug to keep Nicole's lung sacs inflated. The baby was also wired to machines that monitored her pulse, respiration rate, respiration pressure, and oxygen saturation rate. The same day she was born, John, who works in Master Scheduling, donated blood in what was to be the first of many transfusions.

With more blood needed, John asked some of the people in his department if they would help with donations. The response was positive and heartwarming. Before long, Space Systems employees in

other departments also involved themselves in this dire need. John was grateful and overwhelmed. "People would even come up to me in the hallway and tell me they had donated blood for Nicole," he said. "And that included members of their families."

Nicole left the neonatal intensive care unit for home on the weekend before John and Anne's tenth wedding anniversary. She weighed four pounds, six ounces after 108 days in the hospital.

John has a special message for all those who showed such wonderful caring and concern for his family:

"The real story is all the Space Systems employees who anonymously made blood donations to Nicole. I had never met many of you before. Your good will, encouragement, and silent prayers inspired me. My wife and I thank you for everything."

New Computer Facility Dedicated at Kearny Mesa

A ribbon-cutting ceremony for the Classified Mission Integration Facility (CMIF) was held in Building 4 at Kearny Mesa. The event was hosted by Mike Felix, program director, DOD Mission Integration, and Ron Schroeder. Over 70 engineers and managers attended.

For many of the guests, it was the first chance to tour the facility where the majority of Space Systems Atlas/Centaur and Titan/Centaur mission integration analyses are performed.

The computer system upgrade is the first use of this machine in a classified mode. This will increase the CMIF's effective computing capacity from 5,400 Computer Usage Units per month to 19,200.



Shown at the ribbon-cutting ceremony of the newly expanded Classified Mission Integration Facility in Building 4, Kearny Mesa are (left to right): Jim England, Mike Felix, Kim Meyers, Tom Clarke, Hiroo Shiba, and Ron Schroeder.

102 TONS PICKED UP!



No, this isn't a new Olympic weightlifting record, it is the amount of paper picked up in the Recycle Program at Space Systems Division's San Diego facilities.

That's going to save a lot of paper and money in the future. It's economical too. We've earned \$6,953.59 so far. But the environmental impact of our joint efforts in this project are even more impressive. To date, we have saved:

- 1,743 Trees
- 337 Cubic Yards of Landfill Space
- 1,060,902 Kilowatt Hours of Power
- 69,615 Gallons of Oil
- 9,792 Gallons of Fresh Water

All buildings in San Diego are now "on-line" and participating in the project. Tom Edwards, Facilities, said, "We have had our first six-ton week. Everyone's cooperation has been superlative. I would like to express a personal 'thank you' to all Space Systems employees for their cheerful and willing participation in this important effort."

SPACE SYSTEMS EMPLOYMENT FIGURES

(Week ending August 23, 1991)

Cape Canaveral	558
Harlingen	422
San Diego	3318
Vandenberg	265
Other Offsite Locations	62
TOTAL	4625

9/6/91

Tuition Reimbursement Program Shines Again



Congratulations to these employees who, through hard work, determination, and assistance from the Space Systems Tuition Reimbursement Program, successfully earned their college degrees.

Front Row: Stephen Cross, M.B.A. Management; Paul Radcliffe, A.S. Electrical Technology; Darryl Adams, M.S. Electrical Engineering; Thomas Sabo, M.B.A.; and Brian McGraw, M.S. Systems Science.

Back Row: John Sardina, M.S. Software Engineering; Bobby Powers, B.S. Business and Management; Walter Thompson, M.S. Aerospace Engineering; Art Wrightson, B.S. Accounting; Ken Gowen, manager, Organizational Effectiveness; David Flatt, M.S. Logistics Engineering; Jon Sessions, M.B.A.; and Spencer Roberts, M.S. Software Engineering.

Not shown: Mike Altieri, Masters in Contract Management; Tony Belardino, M.S. Electrical Engineering; Stephen Bourg, B.S. Mechanical Engineering; Cindy Davis, M.B.A.; Janice Hughes, B.S. Information Systems; Mary Ann Kasza, B.A. Business; Julia Morris, B.A. Social Work; Sharon Orlando, Masters of Public Health; Martin Reuter, M.S. Systems Management; Audrey Robinson-Johnson, B.S. Business and Management; and Nada Shirwani, B.S. Accounting.

FLOWER DELIVERY POLICY EASED

By Dave Walters, Industrial Security

The company policy for the delivery of flowers in vases has been relaxed at all San Diego facilities.

Cut flowers in open vases and balloons are now acceptable to be delivered to lobbies. However, they are subject to inspection by plant protection officers.

Delivery of potted plants, closed containers, or sealed packages remain unacceptable. Persons receiving such deliveries will be called to the lobby and required to take the items to their cars.

If you have any questions on deliveries, call Industrial Security at 44638.

Facilities Requests Care in Disposal of Food

Mike Garrett, custodial supervisor, Facilities, is asking everyone to help control fruit flies during these hot days by properly disposing of food leftovers in the receptacles located in breakrooms or restrooms.

Putting the remnants of lunches or snacks in paper recycling bins or waste baskets adds to the fruit fly problem. If you have any questions or wish assistance with the situation call Mike Garrett at 43285.

Fran Richardson Named New Business Ethics Director



Fran Richardson has been named by General Manager Michael Wynne as Space System's new business ethics director. In this position, Fran will be reporting directly to the general manager on business ethics issues.

Fran will be responsible for administering, managing, and responding to ethics communications; investigating issues; making recommendations; and responding to employees as well as providing business ethics awareness training to the division. Fran, who is also responsible for the Equal Employment Opportunity and Affirmative Action programs, has been a General Dynamics employee since 1984.

Fran stated, "The success of any program can be measured by the service given. My goal is to maintain the high standards that have been in place since the inception of the Business Ethics Program, and to continue to provide a service of confidentiality for all Space Systems employees."

Fran can be reached at extension 43223 or the ethics hotline extension 43263. She is located in the north end of Building 24 on the first floor.

Promotions

Congratulations to these people who received promotions.

Rita Bermudes
Patsy Burroughs
Michael Chiara
Richard Clark
Guillermo De Luna
David Estrada
Anita Galeos
Pamela Galvan
Roderick Gates
Michael Gegere
Salomon Gomez

Kelli Harrell
Randyl Kokkinen
Leonardo Maestro
Yvonne Matthews
Aaron McCormick
Todd Milke
Lance Neal
Leonardo Oliva
Kathy Peak-Jeremy
Richard Pollock

Robert Olson
Robert Sabo
Fred Sanders
Patty Slike
David Smith, Jr.
Rodney Stonebraker
Marvin Tilley
Thomas Urbanek
Wayne Watson
Charity Woods
Arthur Zinser

After-Hours Classes Available at Kearny Mesa

Western Center Training has scheduled the following after-hour classes at Kearny Mesa Building 77. All training will be held on the dates indicated from 4:45 p.m. to 7:45 p.m.

WordPerfect, Basic — September 9, 11, 16, and 18.

WordPerfect, Advanced — October 15, 17, 22, and 24.

Excel Basics — October 14, 16, and 21.

Excel Worksheets, Advanced — September 16, 18, 23, and 25.

MacDraw — September 17, 19, 24, and 26.

Mac Usage and Applications — September 24, 26; October 1, 3, and 8.

Writing with Confidence — October 2, 3, 7, and 8.

Effective Communication — October 7, 9, 14, and 16.

Microsoft Word — October 8, 10, 15, 17.

Excel Charts, Advanced — October 22, 24, 28, and 29.

Powerpoint — October 23, 30, and 31.

If you are interested, contact your training coordinator or Western Center Training at 33930. Also, if there are classes you would like to see offered after-hours, let Western Center Training Center know. They can teach groups of four or more.

Inside Space . . .

Attention all runners: the **Third Annual CRA Fun Run/Walk** will be held Sunday, September 29. For entry forms and information, call the Health Fitness Center at 39921....

Dick Claridge, a mechanical engineer at Cape Canaveral, has recently been honored by having a biographical record published in the 22nd edition of *Who's Who in the South and Southwest*.... You folks that have opinions or suggestions for improving customer service at Western Center will have a chance to let 'em know what you think in the **3rd Annual DSD-WC Customer Service Survey** in September.

Jeanne Peters at 33867 is the point of contact for the survey.... Space Systems inventors are staying busy. **David Madura, Eddie Leung, and Richard Bailey**, Concepts and Design and Test and Evaluations, applied for a patent entitled *Electromagnetic Sabot Separation Technique*. **Kevin Giesy** in Materials and Processes Engineering is working for a patent on his application called *Reeding Edge for Securing in Place Fiber Band during Filament Winding Operation*.

Santa Is Coming — Santa Maria BBQ, That is!

Saturday, September 21, 1991

Ticket Prices

Adults: \$8 — Children: \$2

Menu

Prime Beef, Ranch Beans, Potato Salad,
Sourdough French Bread, Ice Cream, Sodas, Beer

Schedule of Events

Noon — Park Opens
1:00 p.m. — Children and Adult Games
3:00 p.m. — Dinner
5:30 p.m. — Scholarship Drawing

Special Attractions

- Live Country-Western Band • Games & Prizes •
- Scholarship Drawing & Prizes • Train Rides • Carousel •



Space Systems Division *Orbiter* is published every other Friday. Items of interest to reader should be addressed to:

Orbiter

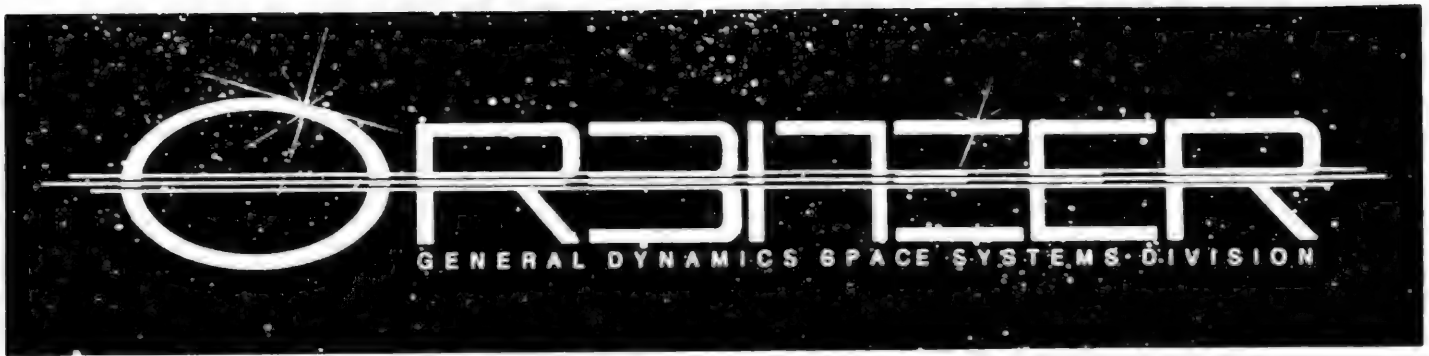
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September 20, 1991

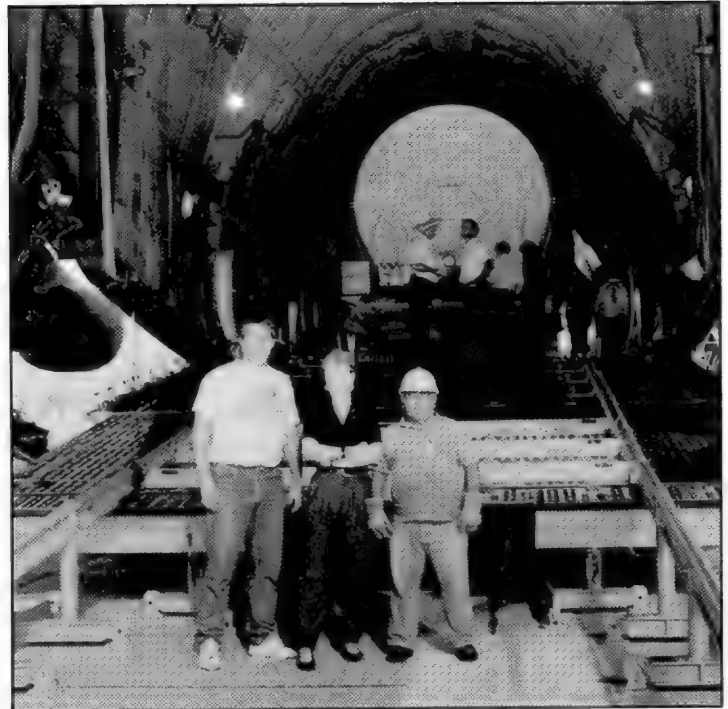
Titan/Centaur 9 Accepted and Shipped to Cape Canaveral

After a series of difficult challenges, Space Systems finalized the sale of Titan/Centaur 9 and shipped the vehicle to Cape Canaveral on August 29, 1991.

One of the problems encountered and solved was an aft separation ring test failure in which the entire aft adapter had to be swapped out for a modified version. In addition, the failure of AC-70 inspired extensive Foreign Object Damage inspections that included the propellant tanks and ducts, and the Pratt and Whitney engines. After the completion of these additional tasks, the fourth and final San Diego Hardware Acceptance Review was successfully completed on August 27, and the long awaited signing of the Incremental Certificate of Completion marking the event took place the following day.

The pace of the operation kept up when, on August 29, the vehicle was loaded onto a C5 cargo plane for the flight to Cape Canaveral. Accompanying TC-9 were Karen Lundeen, the TC-9 vehicle manager from the Titan/Centaur Program Office, Tom Dresser and Robert Macias from Tank Watch of Space Systems, Mike Tregarthen of Martin Marietta, and Lieutenant Bob Collins of the U.S. Air Force. Harvey Ennis and Vince Sherrod of Space Systems were the Move Safe representatives.

At the Cape, TC-9 has been rotated to the vertical position and put in cell 3 of the Vertical Integration Building. On September 7, it successfully completed the Centaur Combined Electrical Test, the vehicle's first power-on.



Bob Olson, Karen Lundeen, and George Zuniga stand at the rear ramp of the C5 after TC-9 was loaded.



The crew prepares TC-9 for the final phase of loading into the C5 transport aircraft

The Orbiter Has Moved!



The editor is now located in CP2. The mail zone is C2-7092, phone (619) 547-3234, fax 547-9180, and EM/OS ANDREWS.PE.

Safety Program Includes Participation by Employees



Jo Thomas, Human Resources assistant, and Bill DeGarmo, manager of Safety and Health, discuss a recognition program for two shop departments that have worked more than 500 days without having a lost-time injury.

The Space Systems Division Safety and Health Department is dedicated to providing a proactive, accident prevention approach that encourages employees to become a part of the safety process. Many ideas and suggestions that bring about change come from employees at every level in the division. One very important element is periodic safety meetings in which supervisors present a safety topic and encourage employee input.

Top management supports efforts to make the division a safer place to work. Injury and illness rates are a regular topic during monthly business review meetings.

As an employee, you can make a significant contribution. Report any safety concerns you have to your supervisor. A staff of trained professionals will support you and your supervisor in quickly correcting unsafe situations.

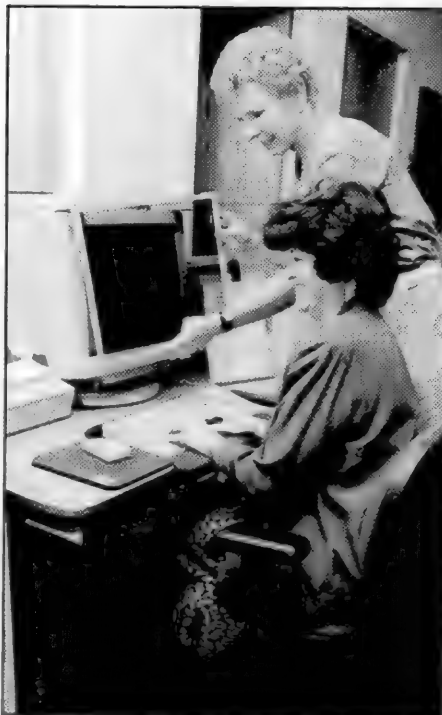
Bill DeGarmo, manager of Safety and Health, states, "My staff and I believe strongly in listening and encouraging employee participation."

Space Systems Safety and Health Charter

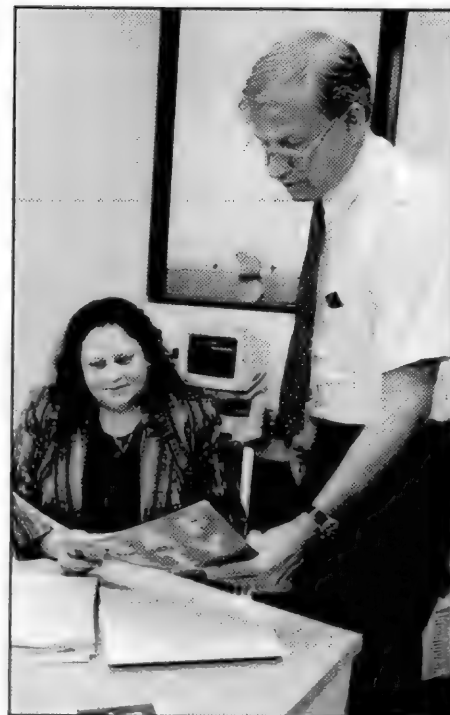
- Provide a safe and healthful work environment for all employees.
- Continuously improve the division's injury prevention process.
- Ensure division compliance with existing standards, codes, and regulations.



Jerry Rappaport, Material Safety Data Sheet (MSDS) coordinator, and Etta Wilson review MSDS information on incoming products. They are working on the divisionwide computerization of hazardous material MSDS's. This information is then shared with employees to comply with the Hazard Communications Rule. The MSDS information is available on HEALTHNET, which is an interactive computer network.



Elaine Briggs, industrial hygiene specialist, is shown working with Karen Spanelli on a work station redesign to reduce the stresses that can result from poor posture and positioning of equipment. Elaine heads up the division's Ergonomics Program and is working on numerous plant and office projects to reduce the necessity for employees to stoop or reach while performing their jobs.



Walt Zukowski, senior safety engineer, and Cindy Fink, workers compensation administrator, discuss the General Dynamics early-return-to-work program. This program permits injured employees to return to productive work as quickly as possible following a work-related injury. Walt is pointing out the specific requirements of the job that must be considered.

9/20/91

Space Systems Honored by San Diego County as Outstanding Volunteer

Barbara Penn, coordinator of Volunteers in Social Services for the County of San Diego, has informed Space Systems Division it has been chosen as an Outstanding Volunteer of 1990. "You have been selected from nearly 500 other Department of Social Services' volunteers," Barbara said, "because you have gone above and beyond in your volunteer gifts to us and the clients we serve."

The kudos were for outstanding participation in the Angel Tree Project in December 1990. This program distributed Christmas gifts to abused and neglected San Diego children under the care of the Children's Service Bureau of the San Diego County Department of Social Services. A total of 447 kids received over 1,100 presents from donations by Space Systems employees. Barb Oliver was the driving force behind the division's efforts that also included sorting and wrapping gifts at the county warehouse.

The Angel Tree Project, now called Share Bear will be continued in 1991. Carolyn Wilson of Graphic Services will be this year's coordinator. Carolyn can be reached at extension 78900.



Barb Oliver, the driving force behind Space Systems 1990 Angel Tree Project, proudly holds the Outstanding Volunteer Certificate awarded the division by San Diego County.

Space Systems Teaching Excellence Grant Program In Full Swing

San Diego . . .

Patrick Andrews, coordinator for Space Systems Teaching Excellence Grant Committee, has announced the following employees, all former school teachers, as members of the 1991-1992 selection committee:

Carol Aguilar — 7 years teaching experience in elementary and middle school.

Jaine Derrough — 9 years of teaching in junior high school, high school, and junior college.

Johna Hanson — 9-1/2 years teaching experience of 7th grade through college.

Yolanda Mendoza — 2 years of elementary school teaching.

Thom Sabo — 10 years teaching experience in junior high, senior high, and junior college.

These volunteers will judge the applications for three \$1,000 grants from San Diego County school teachers. The winners will be announced in late November or early December.

Vandenberg . . .

Space Systems at Vandenberg Air Force Base presented Teaching Excellence Grants to two teachers of the Santa Maria-Bonita School District. The honorees received \$500 each.

Carol Bantz from Tunnel Elementary School received her teaching award for a Traveling Science Suitcase proposal. The suitcase is filled with materials and

instructions for conducting science observations and experiments at home. The project will promote the study of science and help develop reading, writing, speaking, listening, and critical thinking skills.

Gene McGee, a teacher at Fesler Junior High School, was chosen for a grant for his proposal to purchase a flex shaft motor unit for use in the Investment Casting vocational program. This activity will provide students with a realistic casting and deburring experience as found in an actual industrial environment.

Chuck Harter, director of Space Systems at VAFB, presented the teaching award checks to the teachers during a National Management Association dinner meeting. Fidenzio Brunello, assistant superintendent of the Santa Maria-Bonita School District, and Doug Palmer, director of Student Services, attended the meeting along with the teachers and the principals of their schools.

Cape Canaveral . . .

The Teaching Excellence Grant Committee at Cape Canaveral recently announced the winners in its 1991 program for local school teachers.

Beth Littlefield, chairperson of the committee, said, "We received 34 proposals this year. Of those, we chose to fund three."

The winners were:

Patricia Long, a 7th grade Teacher at Southwest Junior High School in Palm Bay, Florida. She received \$303.95 for a proposal for a Cooperative Problem Solving Unit. This is designed to improve math language skills in junior high students.

Patricia Barden, a 3rd grade teacher at Apollo Elementary School in Titusville, Florida received the second grant. She has been awarded \$350 for a hands-on social studies project to study city planning and city government.

Robin Ward, a 2nd grade teacher at Imperial Estates Elementary School in Titusville, was given \$298 to purchase a microscope to be taken into the field to study microorganisms in their natural setting.

Space Systems' CCAFS chapter of the National Management Association accepted the committee's recommendation to award a fourth grant to Mike Galiszewski who teaches the 8th grade at Central Junior High School in Melbourne, Florida. He was granted \$300 for a science course that will allow hands-on activities and experiments 90% of classroom time.

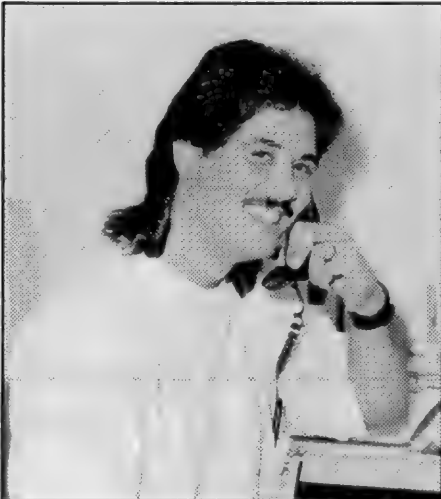
The CCAFS Teaching Excellence Grants Committee consisted of Chris Bielous, Larry Craig, Beth Littlefield, Stacy Murphy, Jeff Peacock, Bruce Stang, J.P. Stroud, and Laurene Willard, a teacher at MILA Elementary School.

Great Space Systems Teams

Dispatchers Act As Ground Traffic Control



Harold "Mac" McAvenia, okays a truck for dispatch at Kearny Mesa.



Rick Sides takes a call requesting transportation at Plant 19.

The purpose of the Space Systems Division *Orbiteer* is to report the way teams of employees work together, to show the superior products they produce, and the excellent services they provide.

The division has dozens of vehicles available for unceasing demands of pick-up, hauling, and delivering. Getting the right set of wheels to the right place at the right time is the responsibility of Harold "Mac" McAvenia at Kearny Mesa and Rick Sides at Plant 19. But that is only part of their duties. Mac and Rick also dispatch forklift drivers for inner plant movement, coordinate loading and unloading vendor trucks at Shipping & Receiving, regulate vendor runs between Plant 19 and Kearny Mesa, ensure the timely pickup of outgoing material, log all incoming and outgoing material, and keep track of the maintenance and condition of company vehicles. And, if that isn't enough, when a driver isn't available in an emergency, they'll get behind the wheel themselves.

If your department needs a vehicle for pick-up and/or hauling, give Mac a call at 75400 at Kearny Mesa or contact Rick's Plant 19 extension at 23410.

Their work philosophy is the same as the Wells Fargo tagline in the Old West, whose motto was: *You call, we haul — that's all!*

Retirees

Thanks and good luck to these Space Systems employees who recently retired:

Joe Alcala, Director - Division Productivity, 34 years

Dick Bethel, Engineering Specifications Rep, 24 years

John Beveridge, Engineering Specialist, 1.5 years

Rudolph Casados, Missile Assembler, 46 years

Ed Ford, Logistics Administrator, 39 years

Don Gowin, Chief - Manufacturing, 32 years

Bob Johnson, Program Director, 37 years

Bill Kelly, Production Specification - Senior, 41 years

Rudolph Lopez, Engineering Research & Development, 32 years

George Mees, Supervisor Quality Assurance - Base, 29 years

John Nelson, Engineering Specialist, 20 years

Gustavus Scott, Engineer 7 years

Will Su, Project Engineer - Senior, 34 years

John Sutliff, Engineering Specialist - Senior, 27 years

Lawrence Vandborg, Launch Service Technician-Senior, 32 years

Glen Wadleigh, Engineering Specialist - Senior, 34 years

Maternity Fraternity Offers Special Program

The division Human Resources Department will present *Journey to Maternity and Beyond* on October 10 in the Conference Center located in the lobby of Building 24 at Kearny Mesa. The program is designed to inform employees and their spouses of division policies and programs regarding pregnancies.

There will be two presentations: the first from 11:00 a.m. to noon and the second from noon to 1:00 p.m. Bring a lunch and join the group. To reserve a place and for more information, call Becky McDonald at extension 44135.

CRA Club Day Set Up for "Show and Tell"

CRA is going to "show and tell" what recreational opportunities are available to employees and their families.

The organization boasts over 50 clubs serving the San Diego GD community, offering such diverse activities as aviation, bridge, golf, skiing, woodworking, and more.

Come out to CRA Missile Park on Sunday, September 29 from 8:00 a.m. to 4:00 p.m. or Monday, September 30 from 11:00 a.m. to 1:00 p.m. There will be displays, booths, and demonstrations. In addition, door prizes will be offered.

DON'T FORGET THE SANTA MARIA BBQ Saturday, September 21

MENU

Prime Beef, Ranch Beans, Potato Salad, Sourdough French Bread, Ice Cream, Sodas, Beer

SCHEDULE OF EVENTS

Noon — Park Opens

1:00 p.m. — Games

3:00 — Dinner

5:30 p.m. — Scholarship Drawing

Tickets Available at Missile Park on the Day of the Barbecue

Adults: \$8 — Kids: \$2



October 4, 1991

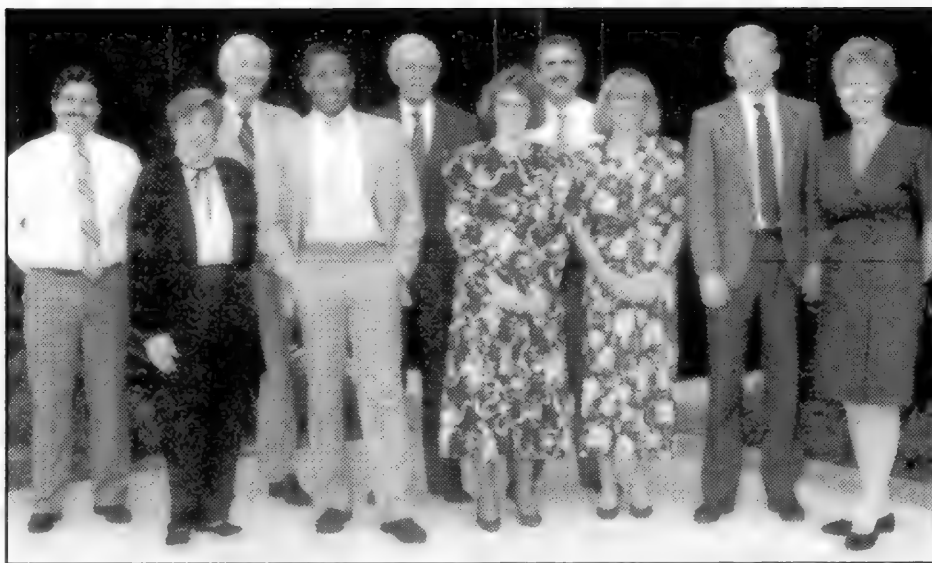
Suggestion Program Is Still in High Gear

A great deal of effort has been expended at all Space Systems Division sites to see that suggesters receive answers to their open or pending suggestions.

1,398 suggestions have been answered since January 1, 1991. 388 of those suggestions answered received cash awards for their implemented ideas by September 6, 1991 is a record year in this program. In 1990, for example, the entire year's awards were 249.

The Employee Suggestion Department applauds the tremendous effort by department Employee Suggestion evaluators and coordinators who continue to work diligently to answer the remaining open or pending 302 suggestions.

If you have any questions regarding your suggestions, contact your department Employee Suggestion coordinator or the Employee Suggestion Department at 44198.



The Space Systems Division Employee Suggestion coordinators pictured here are (back row, left to right): Jack Bono, Dave Hackley, Leo Springer, and Mike Gusha; (front row, left to right) Cyndee Evans, Slick Lindsey, Gayle Croft, Patty Pierson, Don Petersen, and Carla Peak. Not shown are Peggy Burns, Marianne Campos, Kip Chambers, Susi Cowan, Jane Duby, Ron Eckberg, Patti Greener, Charisse Matsumori, Lela Reddekopp, and Pat Whisenant.

Governor Wilson Proclaims Aviation and Aerospace Week

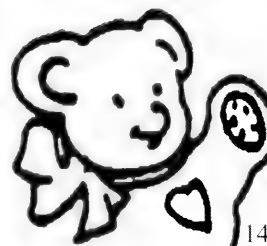
California Governor Pete Wilson has proclaimed October 6-12, 1991 as Aviation and Aerospace Week throughout the state.

Governor Wilson has done this as a special recognition of California's aerospace and aviation industry which employs hundreds of thousands of Californians and is a critically important element in the state's economy. The governor said, "This week of recognition from the people of California represents a golden opportunity for all of us to reflect on the industry's many contributions."

Formerly "Angel Tree"

Tag Writing Party for "Share Bear" Organized

Remember Angel Tree from last Christmas? That's the program the division joined to distribute Christmas gifts to abused and neglected children under the care of the Children's Service Bureau of the San Diego County Department of Social Services. The project is back for 1991, but with a new name — **Share Bear!**



Phyllis Carlson, a volunteer specialist at the Children's Service Bureau, reports that there are currently 14,654 abused

children in the system with about 460 being added each month. That means over 16,000 kids by December. Phyllis said, "I am very nervous because we have made a commitment to give each child at least one gift this holiday season. This is a project which depends on companies like General Dynamics to meet its goals."

On Thursday, October 17, a tag-writing party for Share Bear will be held at the CRA Pavilion in Missile Park from 4:45 to 9:00 p.m. This activity will consist of volunteers getting wish lists from the children in the program and transferring them to decorative tags. Pens, pizza, and beverages will be provided.

Carolyn Wilson, Space Systems coordinator for Share Bear, said, "Any employees who are interested in participating in the true meaning of the holidays a bit early are invited to join the tag-writing party."

If you want to help out, please call Carolyn at 78900.

Promotions

Congratulations to these people who received promotions.

Lola Bailey	Marsha Hamilton	Thomas Nordeck
Jackie Barrington	Jane Mc Kee	Edye Oliver
Estelle Franklin	John Moran	Judi Picard
Terrie Hamen		Lori Russo

Space Systems Team Families

Eric Neitzel Is Wheelchair Racing Champion

Eric Neitzel, fifteen-year-old son of Tom Neitzel, Titan Program Office, has proven himself a super athlete in wheelchair track and road racing.

At the Junior National Wheelchair Athletic Association (NWAA) Games last July in New Jersey, Eric set five national track records. He kept the pressure on the competition by winning all the track events in his class in the 100 meter (32:36 record time), 400 meter (1:01.89 record time), 800 meter (2:05.33 record time), 1,500 meter (4:01.81 record time), and 5,000 meter open class!

Eric competed in the Fifth National Triathlon for the Physically Challenged. This grueling event consists of an 800-yard swim, cycling in which hand-powered cycles are used, and wheelchair road racing. Eric came in third in the Adult Open.

This young athlete is world-class, having competed in Australia as the Junior American champion, where he finished first in the Junior Class and came in 14th out of 79 overall.

Eric is an Olympic hopeful who trains nearly every day on track or road racing, averaging 50 miles a week. As if that's not enough, he also swims laps during gym at school four days a week.

Eric was recently honored as *Sports and Spokes Magazine's* Junior Athlete of the Year. He has also been inducted into the Mickey Mouse Club Hall of Fame which he televised on the Disney Channel at 5:30 p.m., October 18. Locally, Eric was named JAWS (Junior Athletes in Wheelchair Sports) Athlete of the Year.

Everyone at Space Systems wishes Eric the best of luck in all his future competitions. He is an inspiring young man.



Eric Neitzel, son of Tom Neitzel of the Titan Program Office, shows his stuff.

Inside Space . . .

If you are feeling the pressure of caring for an elderly or disabled family member and need aid and/or encouragement, the **Southern Caregiver Resource Center** is holding seminars on the subject. Call 268-4432 for information. . . . **Dick Neal**, HR manager at VAFB, received the Exceptional Service Award from the Air Force Association. . . .

Jim Codd, Charlie Tuck, Frank Watkins, and Tom Weber of Space Systems at Cape Canaveral competed in the First Annual TCI-Cable Vision Golf Classic to benefit the Muscular Dystrophy Association. . . . Athletic accomplishments at the Cape keep going on. Two Space Systems softball teams did well in the CCAFS Men's Softball League. The **Atlas Team** finished second and the **Thrust Team** came in third with the Atlas Team winning the final tournament playoffs. . . . **CRA Travel** is keeping those fun trips rolling along. Two trips are planned for October 12: *The Phantom of the Opera* (\$80) and a visit to the J. Paul Getty Museum (\$27). Call 38248 for details and arrangements. . . .

Richard Bailey, Bob Baldi, and Don Eversberg of the Energy Program and Test and Evaluation had an application for a patent filed entitled *Automatic Detection of Faults Occurring during Magnetic Coil Winding*. . . . If you are unable to attend the **Maternity Fraternity** lunch time seminars, a late afternoon session is scheduled for October 15 from 4:00 to 5:30 p.m. It will take place in Human Resources Conference Room 1 in the northwest corner of Building 24's first floor. Call **Nancy Kimerly** at 77670 or **Elaine Briggs** at 43586 for more information.

10/4/91

Well Done and Thanks!

This is a new feature in the *Orbiter*. If any Space Systems individual or team has performed exceptionally well for you and you wish to give them a pat on the back along with an expression of gratitude, write a short paragraph or a few sentences about their exceptional service and/or performance and send it in. The *Orbiter* will be glad to print it.

Send your kudos to *Orbiter*, MZ C2-7092 or EM/OS ANDREWS, PE. Don't forget to include your name(s) and departments as well as those of the honorees.

GDSS Supports Society of Women Engineers

Space Systems Division's involvement with the Society of Women Engineers of San Diego County (SWE-SD) was very evident at the organization's recent Annual Awards Banquet to honor scholarship winners and corporate sponsors.

Bob DiNal, division vice president of Research & Engineering and John Bodle, director of Structures and Mechanical Systems, attended with their wives.

Four of SWE-SD's officers are Space Systems employees who work in Structures and Mechanical Systems. They are: Debra Kimberling, president; Tina Lucas, first vice president of Member Services; Barb Egan, second vice president of Student Services; and Michele Labre, secretary. It is a rare occurrence when four of the seven

members of SWE-SD's Board of Directors are not only from the same company, but from the same department.

One of SWE-SD's goals this year is to bring in \$10,000 to support their student and member programs. Chapter President Debra Kimberling said, "I am very pleased with all the help and support the division is giving SWE. Space Systems was one of the first companies to pledge their support with a \$1,000 donation to the scholarship fund."

Next year will mark the first award of Space System's SWE-SD scholarship, which will go to a deserving San Diego engineering student.



These members of the Space Systems team attended the San Diego Chapter of the Society of Women Engineers' Annual Awards Banquet. From left to right, they are: Tina Lucas, first vice president; Debra Kimberling, president; Bob DiNal, division vice president of Research & Engineering; John Bodle, director of Structures and Mechanical Systems; Barb Egan, second vice president, and Michele Labre, secretary.

GDSS-CCAFS Hosts Teacher in Fellowship

Space Systems Division at Cape Canaveral Air Force Station participated in the 1991 Florida Summer Industrial Fellowships for Teachers (SIFT).

The program exposes teachers, through summer employment, to the industrial applications of science, math, or computer science. SIFT's goal is to encourage the transfer of industry knowledge and experience to the classroom to increase the number of students choosing careers in those areas.

Space Systems' choice for this summer's fellowship was Tom Hurd, an audio visual specialist at Southwest Junior High School in Palm Bay, Florida. Tim has seven years of teaching experience in the fields of construction and industrial and graphic arts. He worked with Atlas II site engineers and instructors to develop an introduction and overview to a series of training courses for Air Force personnel assigned to Space Launch Complex (SLC) 36A operations. The series will cover each of the main Atlas, Centaur, and ground support systems and how it relates to the total system.

Tim has toured both SLC 36A and B pad, been introduced to video and still photography resources, and to systems engineers as part of the research for his work. Tim is enthusiastic about the program. He said, "I feel after this summer I have a different vocational perspective, not only to teach my students but to counsel them in educational choices for different vocational fields."

SPACE SYSTEMS EMPLOYMENT FIGURES

(Week ending September 20, 1991)

Cape Canaveral	559
Harlingen	420
San Diego	3275
Vandenberg	257
Other Offsite Locations	88
TOTAL	4599

Retirees

Thanks and good luck to these Space Systems employees who recently retired:

Monte B. Adams, Project Engineer-Senior, 32 years

James M. Comeau, Engineer-Senior, 9 years

Angelo P. Emilo, Production Specialist-Senior, 11 years

Joseph J. Guarnieri, Engineering Drawings Checker-Senior, 7 years

Edward B. Herron, Engineering Specialist-Senior, 21 years

George K. Jerahian, Engineering Specialist, 34 years

Kenneth Koba, Engineering Drawings Checker-Senior, 41 years

Walter E. Nagle, Inspector-Launch Service, 34 years

Edward E. Reading, Design Drafter, 37 years

Moses B. Rodriguez, Engineer-Senior, 36 years

Ferdinand B. Spieker, Production Specialist-Senior, 38 years

Grover H. Traphagen, Jr., Buyer-Senior, 7 years

Dennis E. Williams, Engineering Specialist, 35 years

Phillip S. Yip, Engineering Chief, 39 years

Division Joins GD San Diego Auction

The four San Diego General Dynamics divisions joined forces last month to hold an auction of surplus materials and equipment at the Sheraton Hotel on Harbor Island.

Bob Miles of Logistics coordinated the effort for the division, receiving help from a number of departments. The auction was conducted by the Ross-Dove Company, an organization of professional auctioneers that has conducted auctions at GD's Fort Worth and Air Defense System Divisions.

Five hundred bidders vied for 360 lots of material and equipment in this activity to sell excess inventory and free up much needed floor space. In addition, the four divisions raised \$1,162,000 for the corporation.

Employee Honored by March of Dimes

Mike Austin of Mail Services Management received special recognition from the San Diego/Imperial Chapter March Of Dimes organization for his outstanding participation in the 1991 WalkAmerica. Mike placed third in this year's event when he brought in \$3,000.



Kristen Allen, March of Dimes' director of WalkAmerica, told Mike, "Your support helped to make WalkAmerica '91 a success. Proceeds from

the event will assist with the continuation of our vital work in research, medical services, and educational programs aimed at ensuring a healthy birth for every baby."

This is not the first time Mike has triumphed for this worthy cause. In 1989 he brought in \$1,800 and topped that in 1990 with \$2,500. That, combined with 1991's \$3,000, makes a grand total of \$7,300 Mike has raised to fight birth defects in the past three years.

Mike Austin is the kind of employee we can all be proud of when he represents Space Systems in the community.

Computer Sciences to Acquire DSD

Bill Anders, chairman and chief executive officer of General Dynamics Corporation, announced the signing of a memorandum of understanding with Computer Sciences Corporation (CSC) for the acquisition of substantially all of GD's Data Systems Division (DSD) operations. The agreement is expected to be finalized as early as November 1991.

Mr. Anders stated that DSD employees whose jobs are covered by the agreement will be offered comparable positions with CSC. Mr. Anders said, "In day-to-day work with DSD employees, the transition will be barely noticeable."

CSC, with corporate headquarters in El Segundo, California, has more than 24,000 employees and is the premier supplier of information systems and services to the U.S. government.

Journey to Maternity... and Beyond

WHEN: October 10, 1991

WHERE: Conference Center, Building 24 Lobby, Kearny Mesa

TIMES: 11:00 a.m. to noon or noon to 1:00 p.m.

WHO: All Employees, Spouses, and Supervisors

Are you having a baby or planning to do so in the near future? If so, this program is for you. You will learn valuable information about fetal protection and how you as a parent can have an affect on your baby's health and growth. Also, the Maternity Fraternity Program and the company's Leave of Absence Policy will be discussed. A tour of the Child Care Resource Center will also be provided.

Bring a lunch! For more information and to RSVP, call Becky McDonald at 44135.

ORBITER

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ORDITER

GENERAL DYNAMICS SPACE SYSTEMS DIVISION

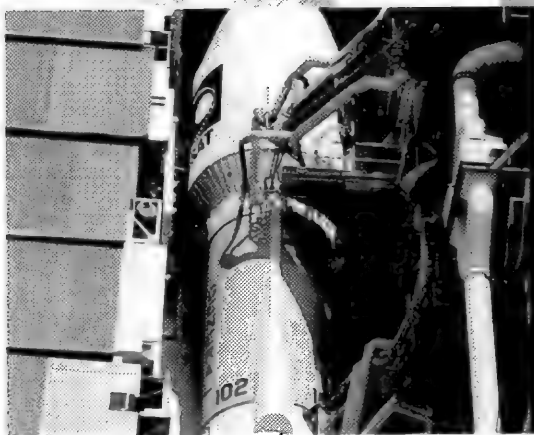
December 16, 1991

On December 7, 1991 at 5:47 p.m. EST, *Atlas/Centaur 102* lifted off from Space Launch Complex 36B at Cape Canaveral Air Force Station carrying EUTELSAT II, a communications satellite.

Anticipation soared at the launch viewing site during an 11-minute delay, allowing time for an unauthorized aircraft to clear the launch area. However, the crowd was rewarded with a spectacular effect as a teardrop-shaped cloud appeared behind the vehicle during the climb into the upper atmosphere where it caught the rays of the setting sun. The rocket could be seen for nearly 5 minutes as it raced through the twilight skies making history

as the first Atlas II launch and the third in a series of six satellites to be put into service by mid-1993.

(See: *ATLAS 102*, next page)

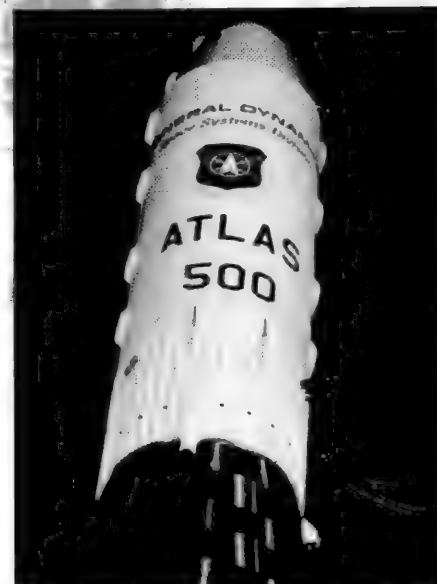


California Central Coast residents received a 5:23 a.m. wake-up rumble on Thanksgiving morning as *Atlas 53E* lifted off into the clear, pre-dawn sky. The 500th Atlas successfully launched the Defense Meteorological Satellite Program (DMSP-11) into orbit from Space Launch Complex 3W at Vandenberg Air Force Base.

The visual effects of the launch were somewhat unique for often-foggy Vandenberg. It left a trail of gray exhaust that was illuminated by the rocket's flames. About two minutes into the launch, two of the rocket's boosters stopped burning, causing a dark hole to appear near the center of the trail. The hole slowly expanded until the exhaust trail disappeared. A pinpoint of light from the rocket remained visible for several minutes before fading from sight.

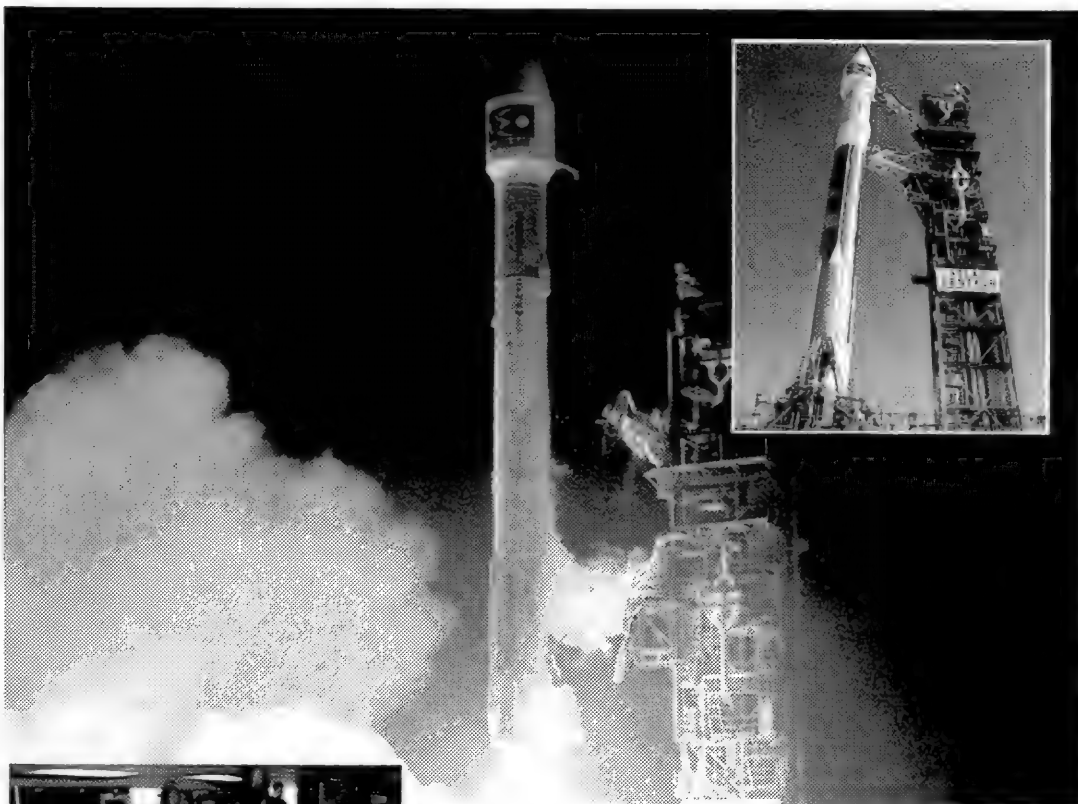
Space Systems General Manager Michael Wynne said, "The 500th launch of an Atlas is a remarkable achievement for our launch team and a tribute to the thousands of engineers and craftspeople who have worked so hard to make the Atlas the reliable launch system it is today." He added, "It is interesting that we mark this important milestone with our Air Force teammates at Vandenberg where Atlas first became operational."

(See: *ATLAS 53E*, next page)



BLAST OFF!

**GDSS Wraps Up
1991 with Two
Big Bangs.**



ATLAS 102 *(Continued)*

The 4,100-pound satellite, built by Aérospatiale of France for the European Telecommunication Satellite Organization (EUTELSAT) will provide Europe with Ku-band services for 16 simultaneously active communications channels. It will be used for television broadcasts, data broadcasting, satellite news gathering, and business communication. Among the satellite's first tasks is to beam the Winter Olympics to 30 European nations this February.

A total of 71 Atlas Centaur missions have flown from Cape Canaveral since the first was launched in May 1962.

THE 100th ATLAS

"A great tribute to the people of Space Division."

— Bill Anders
Chairman and
Chief Executive Officer
General Dynamics Corporation

"...the best launch team in the business... we proved it."

— Gary Baciuska
CCAFS

"...exhilarating pride!"

— Normal Hunter
San Diego

*The rocket
could be seen
for nearly five
minutes as it
raced through*

"A great tonic for all here at the Cape. We thank our colleagues at Harlingen, Vandenberg, and San Diego for the beautiful rockets they send us."

— Sy Baker
Launch Operations Manager
for SLC 36

"A magnificent launch... credit to the team."

— Michael Wynne
General Manager
Space Systems Division

"There were extremely tense moments... Only a few minutes seemed like years."

— Ed Christiansen
SLC 36B Site Manager

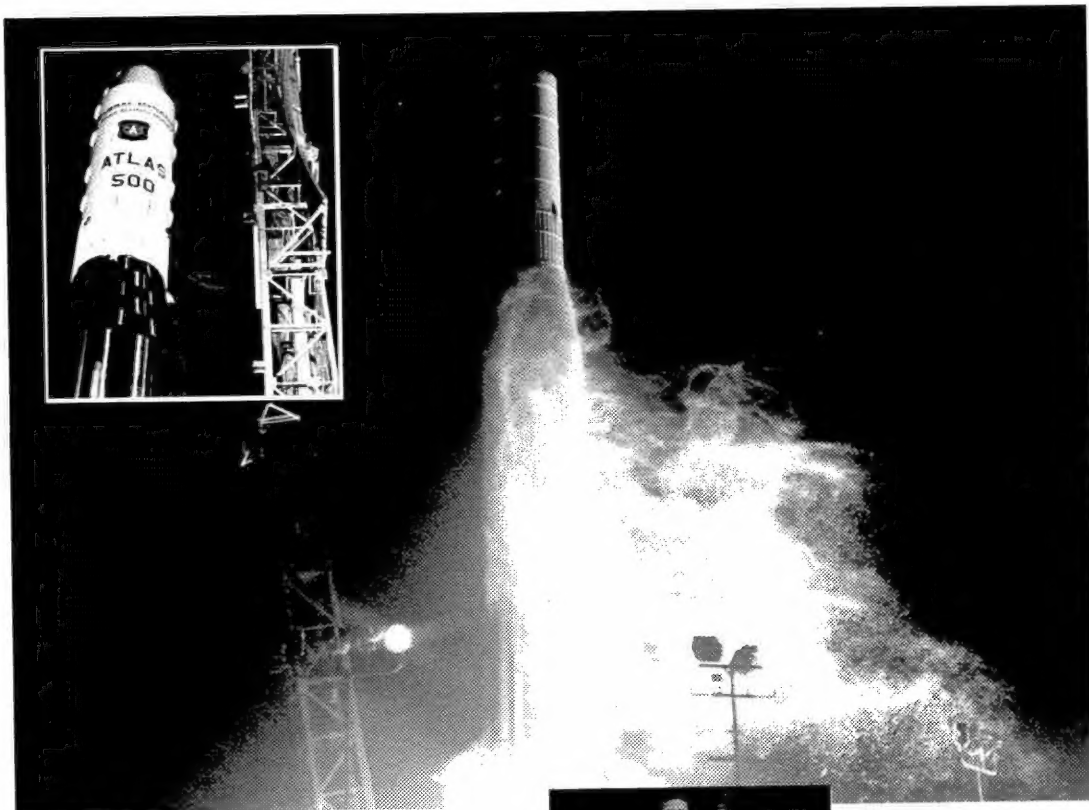


"All of us in the Washington office added at least 1 kg thrust with our thoughts and best wishes at liftoff."

— Alan Chase
Senior Vice President
Government Relations
General Dynamics Corporation

"The entire Atlas Team... can be extremely proud... It'd be the positive note we need as we start 1992, scheduled to be the busiest Atlas/Centaur year in CCAFS history."

— Frank Watkins
Director, CCAFS Operations

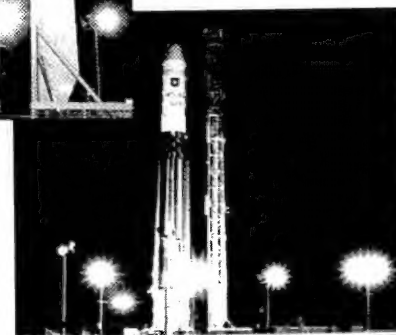
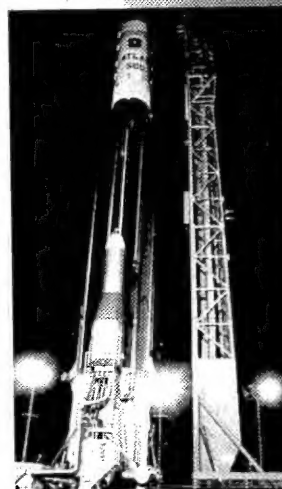


ATLAS 53E (Continued)

The spacecraft, manufactured by General Electric's Astro Space Division, provides a stable, precision platform for sensor instruments which collect data pertaining to the earth's atmosphere, cloud cover, weather, and other phenomena at satellite altitude.

Judd Giesenschlag, program manager of the Atlas E Program, stated, "The Atlas E Launch Team is extremely proud to have had the honor and privilege of conducting the 500th launch of the Atlas Booster. I want to extend my personal thanks to the GDSS Launch Team as well as the major subcontractors, the Aerospace Corporation and the Air Force for their dedicated efforts and support."

The Atlas 53E launch is the twenty-second consecutive successful launch of an Atlas space booster from Vandenberg.



"...an all Space Systems effort. We all did it."

— Chuck Harter
Director of Base Operations

"It was an exceptionally easy process and the countdown went well."

— Dick Smith

"My wish is that every employee could experience the thrill, pride, ownership, and sense of achievement those of us watching the launch experienced."

— Dick Neal



Any Questions for the General Manager?

The annual State of the Division address to be given by General Manager Michael Wynne will take place in January. The date, time, and place will be announced later. Watch for poster and flyers.

In the meantime, if you have any general questions or concerns you believe are appropriate to be addressed as part of the State of the Division program, send them to Vicky Kuick at MZ K4-7090.

CORRECTION

The Titan Centaur referred to in the November 15 issue as TC-9 was actually TC-8. The *Orbiter* regrets the error.

Well Done and Thanks!

Thanks to **Tony Curatolo** and the entire **rigging crew from Transportation** for their extraordinary support in assembling the Atlas IIAS test vehicle at Sycamore Canyon Site B. This difficult job involved lifting the 30-foot-long test tank to a height of over 50 feet and then lowering it gently into the thrust structure with only a small fraction of an inch to spare. Well done!

Mark Gehringer
Engineering Test Labs

(NOTE: If any Space Systems individual or team has performed exceptionally well for you and you wish to give them an expression of your gratitude, send it to the *Orbiter*, MZ C2-7092 or EM/OS ANDREWS.PE.)

Dr. Al Loveleace Assumes New Post in Washington

General Dynamics Chairman and Chief Executive Officer Bill Anders announced the appointment of Dr. Al Lovelace as senior vice president for Space Policy and Technology at the corporate office. He will remain as chairman of Commercial Launch Services in San Diego while operating from his office in Washington.

Bill Anders said, "Al will provide overall guidance for technology development in this highly competitive market. This appointment underscores our commitment to a company leadership role in an increasingly complex world market. At the same time it acknowledges the critical importance of emerging national space policy issues to our efforts."

The CEO also stated that Dr. Lovelace would oversee and coordinate the company's domestic and international efforts in the commercial launch business.

Dr. Lovelace served Space Systems as its general manager beginning in 1985, taking over Commercial Launch Services in 1990. He joined GD in 1981 after serving as deputy administrator for the National Aeronautics and Space Administration since 1976. His last six months with NASA was spent as the acting administrator.

Classified Document Custodians Cut GDSS Security Violations 50 Percent

Ron Davis, Director of Security, reported that as a result of the efforts of our document custodians, division security violations have been reduced by 50 percent in comparison with statistics of just one year ago.

An even more significant accomplishment was that no security violations at all were issued during the months of October and November of 1991.

Ron stated, "This is the first time since the division was formed that we have gone violation-free for a complete month, not to mention two months in a row." He added that he attributes part of the violation reduction to Todd Dolezal's

enhanced security education and awareness program.

Ron wants to extend congratulations to all classified document custodians in the division for a job well done. He encourages their continued cooperation in the future. Ron also noted that the most common type of security violation in the division involves open and unattended classified storage containers.

A Reminder on Chain Letters

Fran Richardson, director of Business Ethics, wants to remind all employees that chain letters are a violation of GD's Standards of Business Ethics and Conduct. If you have any questions or concerns on this subject, please contact Fran on the Ethics Hotline, 49367.

Service Anniversaries

The following employees are observing service anniversaries with General Dynamics in December.

45 Years

Sam Contasti

40 Years

Harold Lee
Murray Ogman
Burnice Slot

30 Years

John Hangartner
Kathryn Milhaud
John Nelson

15 Years

Gerard Szatkowski


10 Years

Nancy Anderson-Metz
Brian Brown
William Clarke
Mary Hastie
Judith Lamb
Carol Serini

5 Years

Barbara Boessow
Reynaldo Buna
Barney Cantrell
James Chavez
Bruce Cline
Joe Dacong, Sr.
Aaron Fortson
Anita Galeos
Catherine Happersett

James Holcombe
Susan Kopp
Davinder Maan
Michael Morrison
Mark Nakamura
Randall Smith
Warren Stumb, Jr.
James Thompson
Kai Tong
William White, Jr.
Jinie Wood



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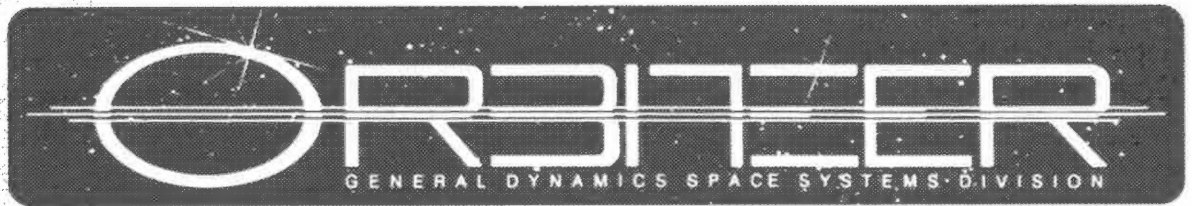
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GRAPHIC COMMUNICATIONS SUPPORT

Ed Passi Graphic Design
Norm Thomas Editorial
Marian Fite Electronic Publishing



December 20, 1991

**GENERAL MANAGER'S
HOLIDAY MESSAGE
TO EMPLOYEES**

To My Fellow Employees:

Most years seem to slowly and easily wind down during the final days, but 1991 certainly didn't come to an uneventful end for Space Systems Division. The final weeks of the year were spectacular as we celebrated two launch successes within nine days of each other. It is exciting to note that both were particularly remarkable and out of the ordinary. When Atlas 53E went up at Vandenberg on Thanksgiving morning, it marked

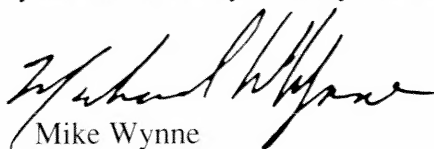


the 500th Atlas launch. The other at Cape Canaveral on December 7 was the first Atlas II to be lifted off. Coupled with TC-8 success, our efforts in Advanced Launch Systems, and the progress in Energy, these are achievements we can be very proud of in the Space Systems family.

1992 promises to deliver the same amount of excitement, with seven Atlas/Centaur launches scheduled throughout the year, two Atlas E launches from Vandenberg, several Titan/Centaur deliveries to the Air Force, and finally, start-up of the manufacturing facility for magnet production in Hammond. Once more, we will need great performances and more than a few heroes to succeed. I've seen the will and enthusiasm to bring it off here at Space Systems Division. Our customers, both internal and external, will expect us to continue to maintain our enthusiasm for satisfying their needs throughout 1992.

As the old saying goes, "Folks, you ain't seen nothin' yet!" I have absolutely no doubt that we will continue to improve our processes and applications in the coming year which will add to the prestige of our programs and Space Systems Division throughout 1992. Such accomplishments will provide our company with a growing reputation for product and schedule reliability that will attract even more business. This will ensure that we will attain our goal to be the "Best in All of Space."

I want to thank you for the dedication and great performance of each individual this past year, and I wish you and your families a very happy holiday.


Mike Wynne

General Dynamics Tops in Work-Family Concerns

General Dynamics Corporation has been rated in the top fifth of 180 corporations that have integrated family and benefit policies to offer employees a flexible package of responses to their needs.

This evaluation came out of a three-year study by Families and Work Institute, a nonprofit education group based in New York. The FWI examined whether workers were afforded caring workplaces to solve work-family concerns.

Roger Groh, GD corporate director for employee benefits, said, "We are pleased at this account of our programs. We've stressed flexibility in our benefits package and employee wellness for a number of years."

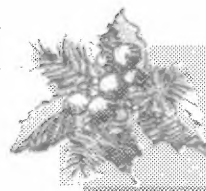
A Reminder

Address Corrections for W2 Forms Needed Now

As the time of the year approaches for the issuance of W2 Forms, we all need to take responsibility for having current mailing addresses in the system. If you have moved since last year's W2s were issued, it is important to submit a change of address card to Payroll, MZ RA-0740, no later than January 3, 1992.

NASA MSFC Selects GDSS for Advanced Transportation System Study

GDSS has been selected by NASA's Marshall Space Flight Center for negotiations on the Advanced Transportation Systems Studies Technical Area 4, Transportation Systems Analyses contract. This study, to be conducted by the Civil Space Launch Vehicles Program Office, will involve future space transportation systems architectures for launch vehicles and transfer vehicles, including the National Launch System.



SEASON'S GREETINGS!

GD SCHOLARSHIPS AVAILABLE FOR EMPLOYEE CHILDREN

from General Dynamics Public Affairs

Applications are available for General Dynamics college scholarships. The company will award three \$5,000 scholarships to outstanding students with financial need. Two \$1,500 awards will be given to outstanding students without regard to financial need.

Eligible students must be children of General Dynamics employees and must be high school seniors planning to major in engineering, physics, mathematics, chemistry, computer science, or business at an accredited four-year college or university.

Applications must be postmarked by February 1, 1992 and sent to the program's administrator. Further information is available in the program's brochures and applications. Call Yolanda Mendoza, ext. 79036, for your copy.

Tuition Tax Exemptions Extended

The Section 127 tax exemption for Tuition Reimbursement programs has been granted an extension through June 30, 1992. For more information, call Teresa Cabading, 44590.

Next Issue: SHAREBEAR SUCCESS

Jim Adler Wins Award for Presentation

Jim Adler of Advanced Avionics Systems was named winner of the Best Presentation Award for Session 37 at the 1991 American Institute of Aeronautics and Astronautics "Guidance Navigation and Control" conference held in New Orleans.

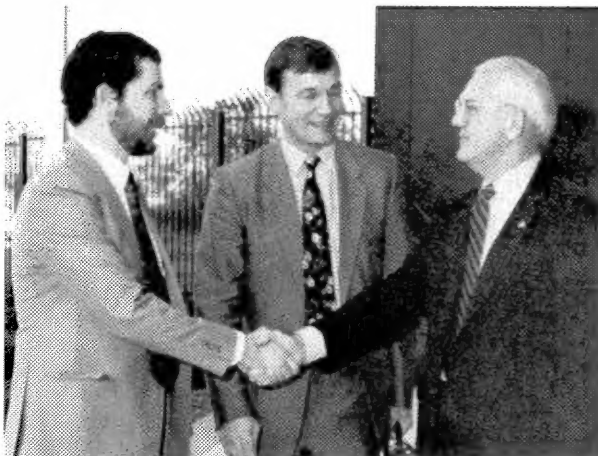
The paper he presented was co-authored by John Saugen, also of Advanced Avionics Systems. It was entitled *Adaptive Control of Propellant Sloss for a Launch Vehicle with Multiple Tanks*.

The paper was based on work Jim and John performed on the Adaptive Guidance, Navigation, and Control project for the National Launch System program.

DIVISION VISITED BY BRITISH AEROSPACE

British Aerospace Space Systems Limited's Michael Dandy, Launch Vehicles manager, and Kevin Blackett, Product Group manager, visited Space Systems Division at the Kearny Mesa site last month.

The visit was in response to an inquiry on composite manufacturing. Space Systems is taking an advanced design look at potential composite parts to reduce weight and vehicle costs when a design change is foreseen.



Ed Ward (far right), representing Space Systems Business Development, greets Michael Dandy and Kevin Blackett of British Aerospace upon their arrival at Kearny Mesa.